

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

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2012-0008-EA

CASEFILE/PROJECT NUMBER: COC-65622
COC75193 (access road)
COC74194 (pipeline)
COC75214 (water line)
COC74194-01 (temporary use permit)

PROJECT NAME: Mesa Energy Lease Obligation Well

LEGAL DESCRIPTION: T3N-R98W-Sec.13-SESE

APPLICANT: Mesa Energy Partners LLC

PURPOSE & NEED FOR THE ACTION:

The purpose of the action is to allow the development of Federal leases on Bureau of Land Management (BLM) surface through the drilling of the proposed well and associated actions. The need for the action is established by the BLM's responsibility under the authority of the Mineral Leasing Act of 1920 as amended by the Federal Land Policy and Management Act of 1976 (FLPMA) to respond to the request to develop the Federal leases.

Decision to be Made: The BLM will decide whether or not to approve the APD, and if so, under what conditions.

SCOPING, PUBLIC INVOLVEMENT, AND ISSUES:

Scoping: Scoping was the primary mechanism used by the BLM to initially identify issues. Internal scoping was initiated when the project was presented to the White River Field Office (WRFO) interdisciplinary team on 11/1/2011. External scoping was conducted by posting this project on the WRFO's on-line National Environmental Policy Act (NEPA) register on 11/8/2011.

Issues: Substantial road upgrades would be required to access the site for drilling. Engineered road designs would be required to address the crossing on Crooked Wash as well as for steep sections and sharp turns.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: An onsite was conducted for this location on 10/31/2011. The APD was received 10/31/2011.

Proposed Action: Mesa Energy Partners LLC (Mesa) proposes to drill an oil/gas well on the undeveloped COC-65622 lease (See Figure 1.). The well pad would be approximately 320ft x 400ft, or 2.94 acres. Stormwater features included, the total size of the well pad during the drilling and completions phases would be 5.9 acres. All areas not needed for production would be reclaimed within six months of well completions, reducing the size of the well pad to approximately 1 acre. The existing BLM 1509 road would be used to access the well pad (See Figure 2.), and two stretches of road totaling approximately 3,000ft would need to be upgraded (See Figure 4). A proposed 790ft access road would turn off of BLM Road 1509 to lead to the proposed well site. The access road would require a 50ft right-of-way (ROW) and would be reclaimed down to a 16ft ditched and crowned travel surface. The proposed pipeline would run alongside the proposed access road (for 790ft) and continue along the BLM 1509 road to tie in at Sonterra Energy’s Rio Blanco Fed #1-30 well site (located 10,100ft from the proposed pad center) (See Figure 3.). A summary of total surface disturbance required to construct and produce the proposed well pad is as follows in Table 1.

Table 1. Total Anticipated Disturbance for All New Proposed Construction

	Ft	Acres
proposed access road	790ft x 50ft	0.91
proposed road following interim reclamation	790ft x 16ft	0.27
proposed pipeline	10,100ft x 50ft	11.59
road upgrades to BLM 1509	3,000ft x 50ft	3.44
well pad	320ft x 400ft	
well pad with stormwater features		5.90
well pad after interim reclamation		1.00

*Total surface area required for construction is 21.84 acres, which would be reclaimed to 1.27 acres after drilling and completions.

Design Features:

A preliminary road design was submitted by Mesa on 11/17/2011 and includes plan and profile figures for five road segments, including roadway cut details, culvert details, water bar details, and a preliminary design for the Crooked Wash crossing. According to BLM standards the minimum culvert size would be 18in and have a minimum of 12in of cover. The designed travel surface on the road is 16ft and turnouts would be placed to improve site distances and allow vehicles to pass. There are several steep sections that will be modified and several turns that need improvement to accommodate the turning radius of the drill rig. All drainage features would be designed to pass the 10-year storm without erosion and the 25-year storm without failing. Mesa intends to spot gravel all section of the road above 10% and other locations as needed. The

specifications of this gravel have not been given. The Crooked Wash crossing will be a low water crossing with large rock over geogrid that is designed to hold the elevation of the crossing.

No Action Alternative: The proposed well pad would not be constructed and drilled, and Mesa Energy’s Lease COC-65622 would expire.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

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

Name of Plan: White River Record of Decision and Approved Resource Management Plan (White River 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.”

AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

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

Cumulative Effects Analysis Assumptions: Cumulative effects are defined in the Council on Environmental Quality (CEQ) regulations (40 CFR 1508.7) as “...the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” Table 2 lists the past, present, and reasonably foreseeable future actions within the area that might be affected by the Proposed Action; for this project the area considered was the Natural Resources Conservation Service (NRCS) 5th Level Watershed. However, the geographic scope used for analysis may vary for each cumulative effects issue and is described in the Affected Environment section for each resource.

Table 2. Past, Present, and Reasonably Foreseeable Actions

Action Description	STATUS		
	Past	Present	Future

Action Description	STATUS		
	Past	Present	Future
Livestock Grazing	X	X	X
Wild Horse Gathers			
Recreation	X	X	X
Invasive Weed Inventory and Treatments	X	X	X
Range Improvement Projects : Water Developments Fences & Cattleguards	X	X	X
Wildfire and Emergency Stabilization and Rehabilitation	X	X	X
Wind Energy Met Towers			X
Oil and Gas Development: Well Pads Access Roads Pipelines Gas Plants Facilities	X	X	X
Power Lines	X	X	X
Seismic	X	X	X
Vegetation Treatments	X	X	X

Affected Resources:

The CEQ Regulations state that NEPA documents “must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail” (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. Table 3 lists the resources considered and the determination as to whether they require additional analysis.

Table 3. Resources and Determination of Need for Further Analysis

Determination ¹	Resource	Rationale for Determination
Physical Resources		
PI	Air Quality	See discussion below
PI	Geology and Minerals	See discussion below.
PI	Soil Resources*	See discussion below.
PI	Surface and Ground Water Quality*	See discussion below.
Biological Resources		
PI	Wetlands and Riparian Zones*	See discussion below.

Determination¹	Resource	Rationale for Determination
PI	Vegetation*	See discussion below.
PI	Invasive, Non-native Species	See discussion below.
PI	Special Status Animal Species*	See discussion below.
NP	Special Status Plant Species*	There are no special status plant species within the project area.
PI	Migratory Birds	See discussion below.
PI	Aquatic Wildlife*	The potential effects of the Proposed Action on native (non-special status) fish species are adequately represented by the discussion for endangered Colorado River fish in the Special Status Animal Species section.
PI	Terrestrial Wildlife*	See discussion below.
NP	Wild Horses	The Proposed Action is not located within a designated wild horse management area. The Proposed Action would have no impacts on the wild horses or the management of the herd management area.
Heritage Resources and the Human Environment		
NP	Cultural Resources	Class III cultural inventory (Davenport 2001 compliance dated 11/17/2011) identified no new cultural resources in the proposed project area.
PI	Paleontological Resources	See discussion below.
NP	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.
PI	Visual Resources	See discussion below.
PI	Hazardous or Solid Wastes	There is potential for hazardous or solid wastes to be generated during the construction, drilling, completions, and production phases of the Proposed Action.
PI	Fire Management	See discussion below.
NI	Social and Economic Conditions	There would not be any substantial changes to local social or economic conditions.
NP	Environmental Justice	According to the most recent Census Bureau statistics (2000), there are no minority or low income populations within the WRFO.
Resource Uses		
PI	Forest Management	See discussion below
PI	Rangeland Management	See discussion below.
NI	Floodplains, Hydrology, and Water Rights	The floodplain on Crooked Wash is not likely to be impacted by the low-water crossing proposed. Freshwater use will be from established locations. No other impacts are expected to floodplains,

Determination ¹	Resource	Rationale for Determination
		hydrology, or water rights.
PI	Realty Authorizations	See discussion below.
PI	Recreation	See discussion below.
PI	Access and Transportation	See discussion below.
NP	Prime and Unique Farmlands	There are no Prime and Unique Farmlands within the project area.
Special Designations		
NP	Areas of Critical Environmental Concern	There are no Areas of Critical Environmental Concern (ACECs) near the project area.
NP	Wilderness	There are no Wilderness Study Areas (WSAs) or lands identified as potentially containing wilderness characteristics (but needing additional inventory work) within the project area.
NP	Wild and Scenic Rivers	There are no Wild and Scenic Rivers in the WRFO.
NP	Scenic Byways	There are no Scenic Byways within the project area.

¹ NP = Not present in the area impacted by the Proposed Action or Alternatives. NI = Present, but not affected to a degree that detailed analysis is required. PI = Present with potential for impact analyzed in detail in the EA.

* Public Land Health Standard

AIR QUALITY

Affected Environment: The Proposed Action is an attainment area for national and state air quality standards, based on a review of designated non-attainment areas for criteria pollutants, published by the Environmental Protection Agency (EPA 2011). The Proposed Action is located more than 10-miles from any special designation airsheds or non-attainment areas. Non-attainment areas are areas designated by U.S. Environmental Protection Agency (EPA) as having air pollution levels that persistently exceed the national ambient air quality (NAAQ) standards. Projects that could impact special designation areas and non-attainment areas may require special consideration from the air quality regulatory agencies of Colorado Department of Public Health and Environment (CDPHE) and the EPA. The closest special designation areas are Dinosaur National Monument which is located northwest of the project area (designated Class II airshed with Prevention of Significant Deterioration (PSD) with thresholds for sulfur oxides and visibility), and the Mount Zirkel and Flat Tops Wilderness Areas located to north and east of the Proposed Action (designated Class I areas). General conformity regulations require that federal activities do not cause or contribute to a new violation of NAAQ standards; that actions do not cause additional or worsen existing violations of the NAAQ standards; and that attainment of these standards is not delayed by federal actions in non-attainment areas.

The Proposed Action is in Rio Blanco County; along with Garfield County this area is called the two County area and is within the Western Counties Monitoring Region of Colorado. The 2010 CDPHE monitoring assessment for this area showed there were 11 particulate monitors in the

western Counties region (APCD 2010). This regional assessment did not include two new BLM sponsored air quality monitoring sites established in 2010 located near Rangely and near Meeker. Local air quality parameters including particulates are being measured at monitoring sites located at Meeker, Rangely, Dinosaur, and Ripple Creek Pass near the Flat Tops Wilderness Area. Ozone data have been collected in Meeker and Rangely since 2010 and at Colorado National Monument in Mesa County since 2007. To a limited extent ozone is also measured at Dinosaur National Monument. The closest location for an Interagency Monitoring of Protected Visual Environments (IMPROVE) site is near the Flat Tops Wilderness, northeast of the Project Area. IMPROVE sites measure visibility impairment from air borne particles.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Construction of the proposed facilities would result in low and short-term impacts on air quality during construction, drilling, completion and, to a lesser extent, from vehicles and gas processing and compression facilities during the production phase. Increases in the following criteria pollutants would occur due to combustion of fossil fuels during construction activities: carbon monoxide, ozone (secondary pollutant formed photochemically from volatile organic compounds (VOCs) and nitrogen oxides (NO_x)), nitrogen dioxide, and sulfur dioxide. Non-criteria pollutants (NAAQ standards have not been set for non-criteria pollutants) such as nitric oxide, air toxics (e.g., benzene), and total suspended particulates may also experience slight, temporary increases as a result of the Proposed Action.

Additional low, short-term impacts to air quality may occur due to venting or flaring of gas from the wells and VOCs from pits and tanks during completion activities. Venting and/or flaring of natural gas is typically done for short periods of time in order to determine potential production amounts and characterize the quality of the gas. VOCs including hazardous air pollutants (HAPs) commonly associated with oil and gas production (benzene, toluene, ethylbenzene, xylene, and n-hexane) will be released during production activities, from tanks, separation equipment, and due to transportation of natural gas, produced water, and condensate by pipeline or trucks.

The majority of dust pollution in Colorado is from miscellaneous fugitive dust sources (CAQCC 2010). Soil disturbance resulting from construction, heavy equipment, and drill rigs is expected to cause increases in fugitive dust and inhalable particulate matter, specifically for particulate matter (PM) 10 microns (µm) or less in diameter (PM₁₀) and particles 2.5 µm or less in diameter (PM_{2.5}). During construction and drilling phases, dust production is likely, especially when conditions are dry and/or windy. Fugitive dust emissions due to construction and drilling would cause low, short-term impacts to local air quality, specifically visibility. Particulate matter is the major contributor to visibility problems because of its ability to scatter or absorb light and can also have human health effects.

Once the wells go into interim reclamation topsoil removed during road construction would be redistributed and stabilized alongside the road, the pipelines should be in final reclamation and the pads should be recontoured and stabilized. As vegetation establishes in the reclaimed areas, dust production will occur only when vehicles travel on the access roads to service the wells. The increase in airborne particulate matter from this project and the other wells previously

approved is not expected to exceed Colorado Ambient Air Quality (CAAQ) or NAAQ standards on an hourly, 8-hour average, or daily basis.

In summary, soil disturbance resulting from construction of pads and roads, pipeline construction, and drilling is expected to cause increases in fugitive dust and inhalable particulate matter in the project area and immediate vicinity and may contribute to reductions in regional visibility. In addition, increases in the following criteria pollutants: carbon monoxide, VOCs, ozone, nitrogen dioxide, and sulfur dioxide would also occur due to combustion of fossil fuels during exploration and production activities. Non-criteria pollutants such as carbon dioxide, green-house gases (GHGs) such as methane and nitrous oxide, air toxics (e.g., benzene), total suspended particulates (TSP), and increased impacts to visibility and atmospheric deposition may also increase as a result of natural gas exploration and development activities (no national ambient air quality standards have been set for non-criteria pollutants). Even with these increased pollutants the Proposed Action is unlikely to result in an exceedance of NAAQ and CAAQ standards, and is likely to comply with applicable PSD increments and other significant impact thresholds.

Cumulative Effects: The Proposed Action is in Rio Blanco County; principal air pollution sources include emissions from motor vehicles, oil and gas development, coal-fired power plants, coal mines, sand and gravel operations, windblown dust, and wildfires and prescribed burns (CAQCC 2010). Facility emissions in the two-county area are dominated by emissions related to oil and gas exploration, processing, or transportation. Due to these emission sources in the Colorado River, White River and in the nearby Unita and Yampa River Basins, VOCs, nitrogen oxides, and dust (particulate matter) are likely to increase into the future. However, with the exception of ozone, overall air quality conditions in the White River Basin are likely to continue to be in attainment of NAAQ standards due to effective atmospheric dispersion and limited transport of air pollutants from outside the area.

Even with increases in emissions of criteria and non-criteria pollutants from this project, air quality conditions in the White River Basin are unlikely to result in an exceedance of NAAQ and CAAQ standards, with the exception of ozone. Ozone levels are influenced by emissions in the White River Basin and from the nearby Unita and Yampa River basins. Data collected in Dinosaur, Meeker, and Rangely have measured exceedance in standards for 1-hour and 8-hour values for ozone (120 ppb and 75 ppb, respectively). To date, these exceedances have not been persistent enough to result in a violation of NAAQ standards.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: No impacts to air quality would result from the No Action Alternative.

Cumulative Effects: Impacts would be similar to those described for the action alternative.

Mitigation: The following should be added as conditions of approval (COAs):

1. The operator shall employ dust suppression techniques as outlined in the surface use plan whenever there is a visible dust trail behind vehicles during the construction and

drilling phases of the Proposed Action. Any technique other than the use of freshwater as a dust suppressant on BLM lands will require prior written approval from BLM.

GEOLOGY AND MINERALS

Affected Environment: Surficial geology of the well location is the tertiary Ohio Creek Formation and located on the northern flank of the Midland anticline (Hail 1973). During drilling, potential water and coal resources would be encountered from the surface to the targeted zone. The CBU 13-16-398 well is located in an area identified in the White River ROD/RMP as having high potential for oil and gas and is outside the area identified as suitable for coal leasing. Limited oil and gas exploration has occurred in the immediate area, consisting of two oil and gas wells (one plugged and abandoned and one shut in) located within a two miles radius of the proposed well (COGCC). The nearest oil and gas field development occurs approximately 6 miles southeast of the project in the White River Dome area.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action isolates the formations and will prevent the migration of gas, water, and oil between formations including coal zones. Development of this well could deplete the hydrocarbon resources within the drainage acreage associated with reservoir characteristics in the targeted formation.

Cumulative Effects: As stated above the Colorado Oil and Gas Conservation Commission (COGCC) database identifies two nonproducing oil and gas wells within a two mile radius of well pad CBU 13-16-398. At a minimum, an additional 24 wells could be required for full field development (320 acre bottom hole spacing) of the oil and gas resources in the two mile radius and could occur. This would be dependent on the reservoir drainage characteristics within targeted formation. Full field development could deplete the oil and gas resources of the targeted formations.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: The oil and gas resources in the targeted zones would not be developed at this time and would remain available for future recovery.

Cumulative Effects: There would be no contribution to the recovery of oil gas resources.

Mitigation: None

SOIL RESOURCES

Affected Environment: The classifications of soils within 30 meters of the proposed surface disturbance that may be impacted by the Proposed Action are shown in Table 4. There are no fragile soils or lands prone to landslides on Federal lands that will be impacted by this project. There are a little over eight acres of saline soils that would be impacted by the road improvements before the crossing of Crooked Wash.

Table 4. Soil Classifications within 30 Meters of the Surface Disturbance Proposed and/or the Centerline of Roads and Pipelines

Soil Classification	Range Site Description	Potentially Impacted Acres
Rentsac-Moyerson-Rock Outcrop, complex, 5-65% slopes	PJ (PJ) Woodlands/Clayey Slopes	29
Rentsac-Moyerson complex, 25-65% slopes	Foothill Juniper	11
Tisworth fine sandy loam, 0-5% slopes	Alkaline Slopes	8
Torriorthents-Rock Outcrop, complex, 15-90% slopes	Stoney Foothills	3
Badland	None	3
Glendive fine sandy loam	Foothills Swale	3

The majority of the soils impacted by the project (70%), including the well pad site, are Rentsac-Moyerson Rock complex or outcrop complex soils with PJ woodlands, foothill juniper and clayey slopes. Rentsac soils are shallow, well drained and are formed by sandstone outcrops. The Moyerson is also shallow and well drained, but is derived from shales. These soils have medium to rapid runoff characteristics and the hazard for water erosion is moderate to very high. The Tinsworth fine sandy loam saline soils on the beginning of the road improvement section are formed from gypsum layers in badland areas along the east side of the road.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action would directly disturb an estimated 22 acres including drilling/production facility pad, access road, pipelines and installation of stormwater management Best Management Practices (BMPs). With proper BMPs for stormwater, construction practices, reclamation practices and mitigation described below, impacts outside the maximum disturbance area are not expected.

The Surface Use Plan (SUP) item 9c indicates that up to six inches of topsoil will be removed. If not enough topsoil is removed for reclamation activities, productivity of soils might be compromised. A minimum of six inches of topsoil should be removed in most locations. Although this depth may include some soils with characteristics that are not typically considered “topsoil” it typically has weathered material and includes more organic material than subsoils and therefore is more valuable for reclamation activities. Therefore taking a minimum of six inches of topsoil would likely preserve soils valuable in reclamation. The SUP item 4c discusses that the travel portion of the well pad would be graveled “if necessary”, due to the clay component of Moreyson soils and since soils in this area can have a very high hazard for water erosion.

Direct impacts from the construction of the well pad, the access road, and pipeline installation would include compaction of soils, removal of vegetation, exposure of subsoil, mixing of soil horizons, loss of topsoil productivity, and an increase in the susceptibility of soils to wind and water erosion. Compaction due to construction activities would reduce aeration, permeability, and water-holding capacities of soils in some locations. An increase in surface runoff could be expected from compacted soils and these soils are likely to be less resilient to erosion from surface runoff after disturbance. Removal of vegetation exposes soils to erosion from rainfall,

wind, and surface runoff. Exposure of subsoil and mixing of soil horizons can change the physical characteristics of subsoil and may reduce the productivity of these soils into the future. Loss of topsoil productivity can occur during storage due to nutrient loss through percolation of precipitation through the soils, physical loss, mixing of less productive soil layers during moving, and a loss of structure.

These direct impacts could result in increased indirect impacts to soils off the site such as increased runoff and erosion. Implementation of BMPs for stormwater, construction, and reclamation will reduce impacts from this project and should limit impacts to the disturbed areas. However, there is the potential for intense storm events and BMP failures resulting in erosion off the site. This is most likely to occur on the steep slopes adjacent to the well pad. Monitoring of areas around the pad as outlined in the stormwater management plan should identify any failure of BMPs or unanticipated erosion.

This project could result in contamination of surface and subsurface soils due to unintentional leaks or spills from pipelines, construction equipment, storage tanks, and production equipment; if these spills occurred they would affect the productivity of soils. Earthen berms are proposed for secondary containment of tank batteries. Without a liner these secondary containments may fail and result in releases of hydrocarbons into the soils in the advent of a leak or spill from the tanks.

Cumulative Effects: Well pads in the general area (Crooked Wash watershed) have been and are likely to continue to be exploratory in nature and would occur at maybe one well pad per square mile. Exploratory wells would include surface disturbance and reclamation of other well pads, pipelines, roads and support facilities. Extensive development of oil and gas in this area has not been proposed at this time. Livestock grazing occurs on public and private lands in the area and may reduce canopy cover and lead to localized erosion in some areas. No other impacts other than oil and gas development and livestock are expected in the Crooked Wash watershed. In general, soil disturbance in the Proposed Action and other activities are likely to reduce soil productivity and may lead to increased erosion and instability of soils in local areas.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: No impacts to soils would occur.

Cumulative Effects: Impacts would be similar to those described for the action alternative.

Mitigation: The following should be added as conditions of approval (COAs):

1. A minimum of six inches of topsoil will be salvaged and stored undisturbed, covered with erosion fabric, and seeded to preserve the soil characteristics for interim reclamation.
2. Due to the nature of the soil conditions on the pad site, the travel portion of the production site will be graveled.

Finding on the Public Land Health Standard #1 for Upland Soils: This action is unlikely to reduce the productivity of soils on public lands.

SURFACE & GROUND WATER QUALITY

Affected Environment: Surface Water: This project is along a large ephemeral to intermittent stream system (estimated at 156 square miles above the road crossing) that drains into Crooked Wash. Table 5 describes water segments that may be impacted by this project.

Table 5. Water Quality Classification Table*

Segment	Segment Name	Use Protected	Protected Beneficial Uses			
			Aquatic Life	Recreation	Agriculture	Water Supply
13a	All tributaries to the White River from the confluence with Piceance Creek to Douglas Creek.	Yes	Warm 2	Not Primary Contact Recreation	Yes	No
12	The mainstem of the White River from Piceance to Douglas Creek	No	Warm 1	Existing Primary Contact Recreation	Yes	Yes

* Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 37 Classifications and Numeric Standards For Lower Colorado River Basin, Effective June 30, 2011

Segment 13a, Crooked Wash, is protected for warm water aquatic life (Warm 2). The warm designation means the classification standards would be protective of aquatic life normally found in waters where the summer weekly average temperatures frequently exceeds 20 °C. The Warm 2 designation means that it has been determined that these waters are not capable of sustaining a wide variety of warm water biota. Segment 13a is use protected; meaning that an intermediate level of water quality protection applies. The antidegradation review requirements are not applicable for use protected waters and only the numerical protection specified in each reach will apply. This segment also has standards that are protective of recreation and agriculture, but not water supply. Segment 12, White River, is protected for warm water aquatic life (Warm 1). The Warm 1 designation means that it has been determined that these waters are capable of sustaining a wide variety of warm water biota. These segments are also protected for recreation, agricultural and in the case of the White River, water supply.

Groundwater: Precipitation in this area generally moves from areas of recharge to surface waters via alluvial aquifers and on the surface during spring melt and rain storms. A substantial portion of annual precipitation infiltrates to deeper bedrock aquifers that contribute to contact springs. Springs and ground water inputs generally occur in both bedrock and alluvial aquifers along valley bottoms.

Contact springs are common in the area and are often the result of upper bedrock aquifers consisting of fractured sandstones and shales. Perched groundwater zones occur locally when saturated zones contact due to differences in permeability and solubility of individual formations.

These perched zones can occur in the ridges between surface water drainages and may be manifested as springs and seeps above the valley floor in outcrop areas especially near the badland soil types.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Surface Waters: Clearing, grading, and soil stockpiling activities associated with the Proposed Action would alter overland flow and natural infiltration patterns. Potential direct impacts include surface soil compaction caused by construction equipment and vehicles, removal of vegetation and disturbance of surface soils, which would increase rainsplash erosion and reduce the soil's ability to absorb water and increase the volume and rate of surface runoff, which in turn would increase surface erosion. Steep-sloped hillsides adjacent and along the road route are the most likely area for this surface erosion to occur. Stormwater measures and BMPs to include periodic monitoring of any erosion problems would be essential to avoid erosion and increased sedimentation to surface waters.

Surface runoff associated with storm events may increase sediment/salt loads in surface waters down gradient of disturbed areas. Sediment can be deposited and stored in minor drainages where it would be moved into Crooked Wash and the White River during heavy convection storms. Surface erosion for this project is most likely during the construction and early production phases of the project and would be mitigated using BMPs for stormwater.

Groundwaters: Potential freshwater zones that are anticipated are shallow zones down to 1,000 feet and additional zones from 1,400 to 3,600 feet below the surface in the Cameo through to the Morapos. These zones would be protected by installing surface casing to a depth of 1,000 feet, an intermittent casing to approximately 3,850 feet and cementing behind these casings to the surface. It is anticipated the well will be cemented behind the production casing. The grade of cement used will vary but will be brought up to previously cementing intervals using standard drilling practices and checked to eliminate gaps between cement.

If drilling additives such as diesel fuel are used during drilling of the surface casing and drilling fluids are lost to groundwater aquifers, aquifers may be contaminated. Using bentonite, freshwater and other additives that cannot contaminate groundwater mitigates the loss of drilling fluids that can be common during drilling since the introduction of these substances would not impact the quality of these groundwater features.

Impacts to groundwater resources could occur due to failure of well integrity, failed cement, surface spills, and/or the loss of drilling, completion and hydraulic fracturing fluids into groundwater. Types of chemical additives used in drilling activities may include acids, hydrocarbons, thickening agents, lubricants, and other additives that are operator and location specific. Concentrations of these additives also vary considerably and are not always known since different mixtures can be used for different purposes in gas development and even in the same well bore. Loss of drilling fluids may occur at any time in the drilling process due to changes in porosity or other properties of the rock being drilled through for both the surface casing and the production hole. When this occurs, drilling fluids may be introduced into the surrounding formations which could include freshwater aquifers, if it occurs when drilling the surface casing.

Hydraulic fracturing is designed to change the producing formations' physical properties by increasing the flow of water and gas around the well bore. Hydraulic fracturing may also introduce chemical additives into the producing formations. Chemical additives used in completion activities for the well will be introduced into the producing formations, but should mostly be pumped back out before production.

Known groundwater bearing zones in the project area would be protected as described by the operator's drilling plan. Groundwater resources (including the contact springs, perched aquifers, and groundwater zones described in the Affected Environment) are all in elevations above the surface casing. With proper drilling and completion practices contamination of groundwater resources is unlikely.

Cumulative Effects: Well pads in the general area (Crooked Wash watershed) have been and are likely to continue to be exploratory in nature and would occur at maybe one well pad per square mile. Exploratory wells would include surface disturbance and reclamation of other well pads, pipelines, roads and support facilities. Extensive development of oil and gas in this area has not been proposed at this time. Livestock grazing occurs on public and private lands in the area and may reduce canopy cover and lead to localized erosion in some areas. No other impacts other than oil and gas development and livestock are expected in the Crooked Wash watershed. In general, the Proposed Action and other activities could increase sedimentation, but it is unlikely that water quality would be impacted in Crooked Wash or the Mainstem of the White River.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: Neither ground nor surface water quality would be impacted by the No Action Alternative.

Cumulative Effects: Impacts would be similar to those described for the action alternative, but would not include the impacts from the Proposed Action.

Mitigation:

1. To protect surface waters below the project area, keep road inlet and outlet ditches, sediment retention basins, and culverts free of obstructions, particularly before and during spring run-off and summer convective storms. Provide adequate drainage spacing to avoid accumulation of water in ditches or road surfaces. Install culverts with adequate armoring of inlet and outlet. Patrol areas susceptible to road or watershed damage during periods of high runoff.
2. When drilling to set the surface casing, drilling fluid will be composed only of fresh water, bentonite, and/or a benign lost circulation material that does not pose a risk of harm to human health or the environment (e.g., cedar bark, shredded cane stalks, mineral fiber and hair, mica flakes, ground and sized limestone or marble, wood, nut hulls, corncobs, or cotton hulls).

3. Prior to commencing construction, an engineering design for the access road must be received and approved by the BLM. This engineering design must be approved by a Colorado licensed professional engineer and include specifications for the Crooked Wash Crossing, all drainage features for the road and modifications planned for increasing the turning radius and reducing the grade to below 10 percent in sections proposed in the preliminary design submitted by Mesa Energy. This design should include peak stormflow calculations for the 10 and 25 year events for the crossing at Crooked Wash along with methods used for calculations.

Finding on the Public Land Health Standard #5 for Water Quality: It is unlikely that construction of the well pad, the access roads and installation of the pipeline would result in an exceedence of state water quality standards.

WETLANDS AND RIPARIAN ZONES

Affected Environment: The Crooked Wash channel supports a riparian community of rush, brook grass, salt grass and willow; with non-native species such as tamarisk, perennial pepperweed and bull thistle common throughout the reach. This system was considered to be at the lower end of properly functioning condition when assessed in 2005.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action is not expected to have any measurable influence on the Crooked Wash channel's riparian character. Currently, the system is functioning properly with adequate vegetative cover (riparian obligate species). Improvements in the existing road crossing may potentially reduce any sediment loads that are currently entering the channel. With the application of BMPs associated with soil erosion, there is no reasonable likelihood that fugitive sediments would have any measureable influence on the function or condition of the Crooked Wash channel or its riparian resources.

Cumulative Effects: The Proposed Action is not anticipated to add substantially to existing or proposed disturbances and would have little influence on riparian communities. See discussion above in *Direct and Indirect Effects of the Proposed Action*.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no direct or indirect impacts to riparian resources under the No Action Alternative.

Cumulative Effects: There would be no contribution to previous or existing disturbances that would potentially impact riparian or wetland resources under the No Action Alternative.

Mitigation: Incorporated into the Proposed Action.

Finding on the Public Land Health Standard #2 for Riparian Systems: The Crooked Wash channel is currently meeting the Land Health Standards for riparian communities. Neither the Proposed nor No Action Alternatives are expected to detract from the continued meeting of these standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed well pad and access road are located within a PJ woodland ecological site; the proposed pipeline is within PJ woodland, stoney foothills, alkaline slopes, and foothill swale ecological sites. Vegetation cover within the project area is comprised primarily of pinyon (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*). Understory vegetation consists primarily of perennial grasses including: Indian ricegrass (*Achnatherum hymenoides*), needle and thread (*Stipa comata*), Junegrass (*Koeleria macrantha*), western wheatgrass (*Agropyron smithii*), and sandberg bluegrass (*Poa secunda*).

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The proposed project would disturb approximately 22 acres. The principal impact to vegetation would be complete removal of vegetation for construction of the well pad, access road and pipeline, and the earthen disturbance associated with removing vegetation. In terms of plant community composition, structure, and function, the principal impact over the long term would occur if cheatgrass or noxious weeds are allowed to establish and proliferate on the disturbed areas associated with well pad and access road construction. If revegetation is prompt and effective, there likely would be no long term impact to vegetation communities within the project area. The applicant has proposed to use BLM native seed mix #3, with the exception of the area where the proposed pipeline will cross a foothill swale ecological site, this seed mix is appropriate for the ecological sites in which the Proposed Action occurs.

Cumulative Effects: The Proposed Action would not add substantially to current or future disturbances within the project area. This project area currently has healthy and diverse plant community composition; therefore the removal of 22 acres of vegetation is not expected to have any measurable influence on the overall plant community.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no action authorized that could influence the upland vegetation on these sites.

Cumulative Effects: There would be no additional contribution to previous, existing, or future disturbances under this alternative.

Mitigation:

1. In addition to the design features submitted by the applicant in the SUP, the applicant shall use seed that is certified and free of noxious weeds. 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 (SN). 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.

2. BLM also recommends using seed mix #5 listed below where the proposed pipeline crosses Crooked Wash.

Cultivar	Species	Scientific Name	Application Rate (lbs. PLS/acre)
Magnar	Basin Wildrye	Leymus cinereus	3.5
Rosanna	Western Wheatgrass	Pascopyrum smithii	3.5
San Luis	Slender Wheatgrass	Elymus trachycaulus ssp. trachycaulus	3
Critana	Thickspike Wheatgrass	Elymus lanceolatus ssp. lanceolatus	3
Timp	Northern Sweetvetch	Hedysarum boreale	4.5
Maple Grove	Lewis Flax	Linum lewisii	1
Alternates:			
Sodar	Streambank Wheatgrass	Elymus lanceolatus ssp. psammophilus	3
	Scarlet Globemallow	Sphaeralcea coccinea	0.5

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Upland plant communities in the project area currently meet the Standard and are expected to meet the Standard in the future following project implementation and successful reclamation of disturbed areas, as described in the SUP which has been incorporated in to the Proposed Action of this document.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The invasive annual cheatgrass (*Bromus tectorum*) is known to occur within the location of disturbance associated with the Proposed Action, primarily in areas of unvegetated earthen disturbance in association with roads, pipelines, and well locations. Halogeton (*Halogeton glomeratus*) is also known to occur within the area of the Proposed Action.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action would create about 22 acres of new earthen disturbance; which if not revegetated with desirable species and /or treated with herbicides to eradicate invasive, non-native species, would likely be invaded and dominated by undesirable species, increasing the potential for fire and the consequent further proliferation of cheatgrass. Noxious weeds could also spread from the project sites to surrounding native rangelands resulting in a long term negative impact. The resulting increase of noxious weeds/cheatgrass could perpetuate a downward cycle of environmental degradation that would be largely irreversible. There would be a low likelihood of long term negative impact if the design features submitted by the applicant in the SUP are followed.

Cumulative Effects: The Proposed Action would contribute to incremental fragmentation of native plant communities, which puts these areas at greater risk for establishment and spread

of noxious and invasive weed species. If noxious weeds establish in these plant communities the health of the upland plant communities and the associated ecological function would decline. With timely and successful reclamation the risk of weed establishment and the effects of fragmentation would be minimized.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no action authorized that would influence the native vegetation of this area.

Cumulative Effects: There would be no additional contribution to previous, existing, or future disturbances under this alternative.

Mitigation: None beyond the design features submitted by the applicant in the SUP.

SPECIAL STATUS ANIMAL SPECIES

Affected Environment: There are no threatened or endangered species that are known to inhabit or derive important use from the project area. The only listed species that has potential to be directly influenced by the Proposed Action is the Colorado pikeminnow. While the species occurs in the White River below Taylor Draw Dam and Kenney Reservoir (~ 26 valley miles from the project area), the White River and its 100-year floodplain from Rio Blanco Lake to the Utah state line are designated critical habitat for the pikeminnow. The White River in Colorado does not appear to support spawning activity, young-of-year nurseries, or juvenile concentrations areas for the Colorado pikeminnow. Additionally, while the listed bonytail, humpback chub, and razorback sucker do not occur in the White River, water depletions in the White River adversely affect these species' downstream habitats in the Green River.

Several BLM-sensitive animal species are known to inhabit or may be indirectly influenced by the Proposed Action, including Brewer's sparrow, northern goshawk, bald eagle, Townsend's big-eared bat, big free-tailed bat, fringed myotis, Great Basin spadefoot, northern leopard frog, flannelmouth sucker, mountain sucker, roundtail chub, and bluehead sucker.

The roundtail chub and bluehead sucker are confined to the White River. Additionally, flannelmouth and mountain sucker inhabit the White River but also occur in small numbers at the confluence (and up to one mile upstream) of the White River and Crooked Wash. Northern leopard frogs are patchily distributed along the Crooked Wash channel and are likely associated with the White River's aquatic and riparian community.

Although the distribution of bats in the WRFO is incompletely understood, recent acoustic surveys in the Piceance Basin and along the lower White River have documented the localized presence of Townsend's big-eared and big free-tailed bats along larger perennial waterways. These bats typically use caves, mines, bridges, and unoccupied buildings for night, nursery, and hibernation roosts, but in western Colorado, single or small groups of bats use rock crevices and tree cavities. Rock outcrops and mature components of PJ which may provide temporary daytime roosts for small numbers of bats are limited in the immediate vicinity of the project area.

Relatively extensive riparian communities are available along Crooked Wash. There are no underground mines or known caves or unoccupied buildings in the vicinity of the project area. Birthing and rearing of young for these bats occur in May and June, and young are capable of flight by the end of July. The big free-tailed bat is not known to breed in Colorado.

The WRFO has about six recent records of goshawk nesting in the Piceance Basin, the nearest being over 20 miles from the project area. Based on BLM's experience, goshawks nest at low densities throughout the Basin in mature PJ woodlands above 6,500 ft and Douglas-fir and aspen stands. Goshawks establish breeding territories as early as March and begin nesting by the end of April. Nestlings are normally fledged and independent of the nest stand by mid-August. An influx of migrant goshawks appear to elevate densities in this Resource Area during the winter months.

Brewer's sparrows are common and widely distributed in virtually all big sagebrush, greasewood, saltbush, and mixed brush communities throughout the planning area. These birds are typically one of the most common members of these avian communities and breeding densities generally range between 10-40 pairs per 100 acres. Although most abundant in extensive stands of sagebrush, the birds appear regularly in small (one to two acre) sagebrush parks scattered among area woodlands. Typical of most migratory passerines in this area, nesting activities normally take place between mid-May and mid-July.

Northwest Colorado lies on the eastern margin of Great Basin spadefoot toad distribution. Spadefoots are known recently from western Rio Blanco County (west of Douglas Creek) and neighboring Uintah County, Utah and appear to be associated with ephemeral stock ponds in valley and basin terrain. There are scattered historical records of spadefoot from Powell Park (White River valley near Meeker, 1997) and a single record from Piceance Creek near Black Sulphur Creek (1973). Although seemingly rare and sporadically distributed in the WRFO, it remains possible that toads occupy shrublands and woodlands in close association with stockponds distributed throughout the project area that retain water over the minimum five week reproductive and larval development period.

The White River corridor is the hub for seasonal bald eagle use of the White River valley. Particularly during the late fall and winter months, several dozen bald eagles make regular foraging use of open upland communities along the river and its larger tributaries. These foraging forays from nocturnal roosts along the White River are dispersed and opportunistic.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Cumulative water depletions from the Colorado River Basin are considered likely to jeopardize the continued existence of the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker and result in the destruction or adverse modification of their critical habitat. In 2008, BLM prepared a Programmatic Biological Assessment (PBA) that addressed water depleting activities associated with BLM's fluid minerals program in the Colorado River Basin in Colorado, including water used for well drilling, hydrostatic testing of pipelines, and dust abatement on roads. In response, the U.S. Fish and Wildlife Service (FWS) prepared a Programmatic Biological Opinion (PBO) that addressed water depletions associated with fluid minerals development on BLM lands. The PBO included

reasonable and prudent alternatives which allowed BLM to authorize oil and gas wells that result in water depletion while avoiding the likelihood of jeopardy to the endangered fishes and avoiding destruction or adverse modification of their critical habitat. The reasonable and prudent alternative authorized BLM to solicit a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in an amount based on the average annual acre-feet depleted by fluid minerals activities on BLM lands. This contribution was ultimately provided to the Recovery Program through an oil and natural gas development trade association. Development associated with the Proposed Action would be covered by this agreement and water-use values associated with this project would be entered into the WRFO fluid minerals water depletion log that is submitted to the Colorado State Office at the end of each Fiscal Year. Implementation of State and federally-imposed design measures to control erosion and spills would limit the risk of contaminants migrating off-site and degrading water quality in the White River.

Northern goshawk: The nearest known goshawk nest is over 20 miles from the project area. Raptor surveys were conducted in November 2011. A northern goshawk was observed in flight near the project area, however no nests thought to be used by this species were found in the project area (survey results provided in *Terrestrial Wildlife* section). Impacts to northern goshawk would be identical to those discussed for woodland raptors in the *Terrestrial Wildlife* section.

Brewer's sparrow: Sagebrush involvement associated with the Proposed Action is limited to roughly 12 acres adjacent to an existing gravel road. While these communities may provide forage and cover resources for Brewer's sparrow, use of these communities is likely suppressed to a certain degree due to the proximity to the existing road. Discussion in *Migratory Bird* section is also relevant to this species.

Bald eagle: Bald eagle foraging use is dispersed and opportunistic across the entire White River Resource Area. The nearest known nest/roost location is nearly four miles from the project area. Disturbance/activity associated with the Proposed Action is not anticipated to have any conceivable influence on local bald eagle populations.

Northern leopard frog/Great Basin spadefoot: There are no known stock ponds in the vicinity of the project area that may provide suitable habitat for Great Basin spadefoot. Northern leopard frogs have been documented along the Crooked Wash channel near the existing road and proposed pipeline crossing. Pipeline installation and road upgrades/improvement at the Crooked Wash channel crossing may potentially supply sediment to the Crooked Wash channel; however, with the application of BMPs associated with soil erosion in addition to an engineered road design, there is no reasonable likelihood that fugitive sediments would have any measureable influence on the function or condition of on the Crooked Wash channel or its aquatic resources (see discussion in *Riparian and Wetland* section). Improvements to the road at the existing channel crossing may actually reduce the amount of sediment that is currently being supplied to the Crooked Wash channel.

Cumulative Effects: Cumulative effects would be similar to those discussed in the *Migratory Bird and Terrestrial Wildlife* sections.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no direct or indirect impacts to special status animal species under the No Action Alternative.

Cumulative Effects: There would be no contribution to previous or existing disturbances that would potentially impact special status animal species or important habitats under the No Action Alternative.

Mitigation: See *Migratory Bird* section.

Finding on the Public Land Health Standard #4 for Special Status Species: The Land Health Standards for special status animal communities are currently being met in the project area. Neither the Proposed nor No Action Alternatives are expected to detract from continued meeting of these standards.

MIGRATORY BIRDS

Affected Environment: The proposed well pad and access road are broadly encompassed by open-canopied PJ woodlands interspersed with low density sagebrush. Pipeline installation would involve more sagebrush dominated habitats. These woodland and sagebrush communities provide nesting habitat for a number of bird species during the breeding season (typically mid-May through mid-July).

The BLM lends increased management attention to migratory birds listed by the U.S. Fish and Wildlife Service (FWS) as Birds of Conservation Concern (BCC). These are bird populations that monitoring suggests are undergoing range-wide declining trends and are considered at risk for becoming candidates for listing under the Endangered Species Act if not given due consideration in land use decisions. Three PJ associated species which likely occur in the project area and are considered BCC include juniper titmouse, Cassin's finch, and pinyon jay. The titmouse and finch occur widely in virtually all available woodlands, but occur at relatively low densities. Pinyon jays are loosely colonial nesters and are patchily distributed throughout the WRFO's woodlands. This species is reportedly an aggressive and persistent re-nester. BCC associated with sagebrush shrubland habitats is limited to the BLM-sensitive Brewer's sparrow, which is addressed in the Special Status Animal Species section.

The development of reserve pits that contain drilling fluids have attracted waterfowl use, at least during the migratory period (i.e., local records: mid-March through late May; mid-October through late November).

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action would result in the direct removal of nearly 22 acres of PJ (~10 acres) and sagebrush (~12 acres) communities. Following natural succession regimes, these communities would take anywhere from 20-30 years (sagebrush) to 100 – 400 years (depending on age of PJ) to return to preconstruction conditions following reclamation. Nearly all of the sagebrush involved (associated with pipeline installation) lies

adjacent to an existing gravel road. Due to the proximity of these sagebrush habitats to an existing roadway, it is suspected that nest densities may be reduced to a certain degree (dependent on traffic levels). Prompt and successful pipeline reclamation would likely enhance forage and cover availability for certain species.

As proposed, pad construction and drilling are scheduled to begin in early December, well outside the migratory bird breeding season. Construction during the winter months would effectively avoid any direct impacts to nesting activities. If drilling activities extend into the spring or summer months returning birds would select nest sites in the face of ongoing activities. Indirectly, functional forage and nesting habitats within 100 meters may be impacted due to reductions in nest densities and avoidance of habitats associated with increased human activity, vehicle traffic and construction activities. Should construction initiation be delayed until the nesting season there would be greater potential to influence nesting activities/outcomes including bird displacement, nest abandonment and possible nestling mortality.

It has been brought to BLM's attention that in certain situations migratory waterfowl have contacted drilling or frac fluids (i.e., stored in reserve pits) during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with frac and drilling fluids that may pose a problem.

Cumulative Effects: The Proposed Action is not anticipated to add substantially to existing or proposed disturbances. Currently, there is very little oil and gas-related disturbance in or around the project area (the nearest, an abandoned location is over two miles away). Although long-term, the removal of 10 acres of PJ woodlands is not anticipated to have a measureable influence on local bird populations as there is considerable suitable habitat adjacent to the project area. Similarly, the loss of approximately 12 acres of sagebrush/grassland communities (associated with pipeline installation) is not expected to impact local bird populations as habitats adjacent to existing roads typically provide limited nesting and forage resources. Prompt and effective reclamation would promote a healthier, diverse plant community which may potentially benefit local wildlife populations as a whole.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no direct or indirect impacts to migratory bird species or important habitats under the No Action Alternative.

Cumulative Effects: There would be no contribution to previous or existing disturbances under the No Action Alternative.

Mitigation:

1. Vegetation removal associated with well pad, road and pipeline development will take place outside the migratory bird nesting season of May 15 through July 15. Earthwork associated with the Proposed Action will be permitted from July 16 through May 14.

2. 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 migratory waterfowl, shorebirds, wading birds and raptors during completion and after completion activities have ceased. Methods may include netting 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.

TERRESTRIAL WILDLIFE

Affected Environment: The lower elevation PJ and sagebrush communities that encompass the project area are categorized by Colorado Parks and Wildlife as big game general winter range. These ranges typically receive heaviest use from October through April.

Mature components of PJ woodlands and rock outcrops which surround the proposed pad location may provide suitable nest substrate for woodland raptors (accipitrine and buteo species, long-eared and saw-whet owls) and golden eagle. Much of the woodlands surrounding the proposed location are open-canopied, even-aged stands which typically provide less than adequate to adequate nesting habitat.

The distribution and abundance of small mammal populations are poorly documented within the Resource Area. Recent trapping efforts undertaken throughout Piceance Basin indicate a high tendency in both sagebrush and PJ communities for more generalized species such as deer mouse and least chipmunk and it is suspected that these species would be relatively abundant in the project area. There are no small mammal species that are narrowly endemic or highly specialized species known to inhabit the project area.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action would remove roughly 22 acres of vegetation, including 10 acres of PJ and 12 acres of sagebrush/grassland communities that provide forage and cover resources for local wildlife populations. Because pad construction and drilling activities are scheduled to take place during the late fall and early winter, there would be greater potential to displace big game as both deer and elk tend to congregate in the surrounding lower elevation PJ and sagebrush habitats during these time frames. Increased vehicle traffic, noise and human activity, particularly during the construction and drilling phase would have the greatest potential to displace local wildlife (contributing to increased energetic demands); however due to the limited amount of activity in the surrounding area, it is suspected that local big game populations would have adequate forage and cover resources available. Local wildlife would be expected to return to the area once drilling has ceased. Of greater consequence is the fact that the Proposed Action represents a new intrusion in an otherwise undeveloped area, particularly in important big game winter ranges. While development of this one well pad will not likely have substantial influence on local big game populations, future increased and expansive development throughout the area has the potential to negatively impact big game (see also discussion in *Cumulative Impacts of the Proposed Action*).

PJ woodlands and rock outcrops within 0.5 miles of the project area were surveyed for raptor use on 11/4/2011. Two unoccupied nest structures were observed during surveys. The first, located approximately 427ft (130m) off of BLM road 1509 was likely used by a Cooper's hawk in recent years. The second, located on a cliff face roughly 2,500ft (760m) from the project area, was likely used by a red-tailed hawk. Although there was no evidence of use during the past nesting season, both structures were in relatively stable condition. As proposed, construction of the pad, access road and pipeline are scheduled to take place in early December and would have no potential to directly influence nesting activities/outcomes. The removal of 10 acres of minimally suitable nesting habitat would likely not have any conceivable influence on local raptor populations. Should drilling activities extend into early spring, returning birds would select nest sites in the face of ongoing activity. However, this may indirectly influence site selection as birds would likely tend to avoid functional habitats in close proximity to disturbances.

Cumulative Effects: The Proposed Action in and of itself is not anticipated to contribute substantially to existing or proposed disturbances, nor is expected to have any measureable influence on local wildlife populations. While this would represent an incremental loss in big game winter range, there is extremely limited development in the vicinity of the project area (nearest, an abandoned well, is ~ two miles from project area). Although unknown at this time, potential for future development is probable. Important big game wintering ranges south of Rangely and throughout the Piceance Basin have, in the past, or are currently experiencing heavy oil and gas-related development. These winter ranges north of the White River remain one of the few areas with limited oil and gas-related development. Increased and expansive development in this area would be expected to contribute to reductions in important big game wintering habitat with potential negative consequences for local big game populations.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no direct or indirect impacts to terrestrial wildlife species under the No Action Alternative.

Cumulative Effects: There would be no contribution to previous or existing disturbances that would potentially impact terrestrial wildlife species or habitats under the No Action Alternative.

Mitigation: None

Finding on the Public Land Health Standard #3 for Plant and Animal Communities: The Land Health Standards for animal communities are currently being met in the project area. Neither the Proposed nor No Action Alternatives are expected to detract from the continued meeting of the Land Health Standards.

PALEONTOLOGICAL RESOURCES

Affected Environment: The proposed well pad, access road and pipeline route are located in an area generally mapped as the Fort Union Formation (Tweto 1979) which the BLM, WRFO has classified as a PFYC 4 formation at the present time. A PFYC 4 formation means that this

formation is known to produce scientifically noteworthy fossil resources (c.f. Armstrong and Wolny 1989).

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: If it becomes necessary to excavate into the underlying sedimentary rock formation there is a potential to impact scientifically noteworthy fossil resources. Impacts to scientifically noteworthy fossils could result in a loss of scientific and paleo-environmental data to the regional paleontological database.

Cumulative Effects: If scientific noteworthy fossils are impacted during project construction there would be an irreversible and irretrievable loss of scientific data to the regional paleontological database. Monitoring of all construction could limit that loss to some extent and recover any fossil material that is exposed. However, there would still be some overall loss of data. Increased human activity in the area could, potentially, result in some unauthorized collection of exposed fossil resources due to the increased accessibility of the area.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no new impacts to fossil resources under the No Action Alternative. There would however, continue to be the slow, natural erosion of the formation with the natural slow loss of data and fossils. This loss is irreversible and irretrievable but very slow compared to the loss resulting from construction activities.

Cumulative Effects: The loss of data under the No Action Alternative is much less than under the Proposed Action but would, never the less, result in an overall loss of scientific paleontological data and loss of some fossils, particularly the smaller, more fragile fossil resources of the formation.

Mitigation:

1. Mesa is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
2. If any paleontological resources are discovered as a result of operations under this authorization, Mesa or any of its agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

3. Any excavations into the underlying native sedimentary stone must be monitored by a permitted paleontologist. The monitoring paleontologist must be present before the start of excavations that may impact bedrock.

VISUAL RESOURCES

Affected Environment: The Proposed Action would be located in an area with a Visual Resource Management (VRM) III classification. The objective of the VRM III class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape can be moderate and management activities may attract attention but should not dominate the view of the casual observer. Any changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The nearest paved road would be Highway 64, which is located several miles away, and the Proposed Action would not be visible to a casual observer traveling along this route. Ranchers or seasonal big game hunters in the immediate area would be the most likely persons, other than those persons engaged in energy related activity, to view the Proposed Action. The Proposed Action would be located either in PJ trees and sagebrush in the immediate surrounding area, or in the distant background. Any above ground facilities should be painted Juniper Green to blend with and mimic surrounding and distant vegetation types. The level of change to the characteristic landscape would be low and the objectives of the VRM III classification would be retained.

Cumulative Effects: There is currently not a lot of energy development within the vicinity of the proposed well pad (there is one shut-in well and three plugged and abandoned wells within 1.5 miles of the Proposed Action, including the access road), so upgrading the road and construction of the well pad and pipeline would create contrasts in shape and color with the surrounding area until reclamation is completed that would be noticeable to members of the public using the BLM 1509 road.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no modifications on the existing landscape; therefore there would be no additional visual disturbances.

Cumulative Effects: None.

Mitigation:

1. All permanent (onsite for six months or longer) structures, facilities and equipment on BLM lands placed above ground shall be painted BLM Standard Environmental Color Chart Juniper Green within six months of installation, unless otherwise directed by the White River Field Office Visual Resources Specialist.

HAZARDOUS OR SOLID WASTES

Affected Environment:

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

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The proposed activities may use regulated materials and will generate some solid and sanitary wastes. The potential for harm to human health or the environment is presented by the risks associated with spills of fuel, oil and/or hazardous substances used during oil and gas operations. Other accidents and mechanical breakdowns of machinery are also possible.

Substances used in the hydraulic fracturing process may be harmful to human health or the environment. However, freshwater-bearing formations and other resources suitable for human use or consumption are isolated from man-made materials used in oil and gas operations through the use and cementing of surface casing, see 43 CFR §3162.5-2(d).

Cumulative Effects: The Proposed Action should not contribute to adverse impacts to human health and/or the environment if the SUP as proposed is properly implemented, and the following mitigation measures are adhered to.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: No hazardous or other solid wastes would be generated under the No Action Alternative.

Cumulative Effects: Not implementing the Proposed Action would reduce the risk of harm to human health and/or the environment by one well, but the No Action Alternative would not substantially result in a cumulative change to the resource area.

Mitigation:

1. All lessees and/or operators and right-of-way holders shall comply with all federal, state and/or local laws, rules, and regulations, including but not limited to onshore orders and notices to lessees, addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.
2. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the BLM WRFO.
3. Through all phases of oil and gas exploration, development, and production, all lessees and/or operators and holders of rights-of-way shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing: 1) emissions, 2) fresh water use, and 3) utilization, production, and release of hazardous material.
4. All substances that pose a risk of harm to human health or the environment shall be stored in appropriate containers. Fluids that pose a risk of harm to human health or the environment, including but not limited to produced water, shall be stored in appropriate containers and in secondary containment systems at 110% of the largest vessel's capacity. Secondary fluid containment systems, including but not limited to tank batteries shall be lined with a minimum 24 mil impermeable liner.

5. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials 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.
6. As a reasonable and prudent lessee/operator in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
7. As a reasonable and prudent lessees/operator and/or right-of-way holder in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or right-of-way holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility.
8. With the acceptance of this authorization, the commencement of operations under this authorization, or within thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the right-of-way holder and the lessee/operator, and through the right-of-way holder and lessee/operator, its agents, employees, subcontractors, successors and assigns, stipulate and agree to indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

FIRE MANAGEMENT

Affected Environment: The project area lays within the B4 polygon which allows management of small sized fire disturbances to promote a vegetation mosaic pattern representing a spectrum of successional stages (age classes) in continuous sagebrush stands and to maintain extent and distribution of low (<3ft) forms of sagebrush type as high-density sage grouse winter use habitat. Fires within this polygon may receive an appropriate response to include perimeter control for occurrences at planning/preparedness levels (PPL) 1 and 2. At PPL 3 and above, the appropriate strategy is direct control with the goal of suppressing 90% of all fires at 10 acres or less.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Short term effects will increase fire potential and possibilities of human starts. Long term effects will give a fire break to stop future fires with continued higher possibility of human starts.

Cumulative Effects: This project will create higher fire potential and also give fire personnel a fuels break to work off of.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no change from the present conditions.

Cumulative Effects: The fire environment would remain the same without increase of human starts and without a future fire break.

Mitigation:

1. No wind rows and large piles can be created. Only woody material that will be used for reclamation should be kept onsite. Useable firewood can be stacked along the road for the public to pick up, can be chipped to a cover less than 5 inches thick, or be removed unless used for reclamation. Also see Forest Management.
2. When working on lands administered by the BLM WRFO, notify Craig Interagency Dispatch (970-826-5037) in the event of any fire.
 - a) The reporting party will inform the dispatch center of fire location, size, status, smoke color, aspect, fuel type, and provide their contact information.
 - b) The reporting party, or a representative of, should remain nearby, in a safe location, in order to make contact with incoming fire resources to expedite actions taken towards an appropriate management response.
 - c) The applicant and contractors will not engage in any fire suppression activities outside the approved project area. Accidental ignitions caused by welding, cutting, grinding, etc. will be suppressed by the applicant only if employee safety is not endangered and if the fire can be safely contained using hand tools and portable hand pumps. If chemical fire extinguishers are used the applicant must notify incoming fire resources on extinguisher type and the location of use.
 - d) Natural ignitions caused by lightning will be managed by Federal fire personnel. If a natural ignition occurs within the approved project area, the fire may be initially contained by the applicant only if employee safety is not endangered. The use of heavy equipment for fire suppression is prohibited, unless authorized by the Field Office Manager.

FOREST MANAGEMENT

Affected Environment: The Proposed Action is located within a productive exposure stand classes of Juniper woodlands as defined by a survey performed by White River Field Office personnel from 2003-2005. Productive exposure types occur on primarily lower gradient slopes and north and east aspects. Growth rates are higher in these areas due to soil features which allow for effective use of precipitation. This habitat type is further broken down based on the age class of the stand and in this case the affected stand is mature. Mature juniper trees on productive exposure establish themselves as the dominant plant community on the site. Mature stands are valuable locally as a source of fire wood.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Table 7 shows the estimated loss of woodland acres that would occur as a result of the Proposed Action. Following reclamation, it is expected that pinyon and juniper will invade the site within 50-70 years and would develop a mature stand within 250-350 years. Under the Proposed Action about 18.4 acres of woodlands would be removed. The loss of juniper woodland would adversely affect wildlife and nesting habitat. Impacts would be long-term until woodlands regenerate successfully.

Table 7. Acreage of woodland removal resulting from the Proposed Action

Well Name	Acreage In Woodlands					
	Pad Acres	Access Rd. (Ac)	Pipeline	Acres Disturbed (Total)	Stand Class	Total Cords
Mesa Lease Obligation Well	5.9	0.91	11.59	18.4	Mature Productive Exposure	92

Cumulative Effects: Removal of mature and middle-aged juniper trees would reduce the potential for outbreak of woodland diseases and pest infestations. Acceptance of mitigation measures outlined for fire management would reduce the build-up of cleared woody material from the Project Area, reducing the likelihood of slash contributing to possible large fire events. Other impacts would be long-term until woodlands regenerate successfully.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: Under this alternative there would be no construction of the wellpad and no removal of juniper woodlands.

Cumulative Effects: Under this alternative there would be no construction of the wellpad and no removal of juniper woodlands.

Mitigation:

1. In accordance with the 1997 White River RMP/ROD, all trees removed in the process of construction shall be purchased from the BLM. Trees should first be used in reclamation efforts and then any excess material made available for firewood or other uses.
2. First, woody material will be chipped and stockpiled for later use in reclamation. Woods chips can be spread at a depth no greater than 4-5 inches. Woody materials, not used for woods chips, required for reclamation shall be removed in whole with limbs intact and shall be stockpiled along the margins of the authorized use area separate from the topsoil piles. Once the disturbance has been recontoured and reseeded, stockpiled woody material shall be scattered across the reclaimed area where the material originated. Redistribution of woody debris will not exceed 20 percent ground cover. Limbed material shall be scattered across reclaimed areas in a manner that avoids the development of a mulch layer that suppresses growth or reproduction of desirable vegetation. Woody material will be distributed in such a way to avoid large concentrations of heavy fuels and to effectively deter vehicle use.

3. Trees that must be removed for construction and are not required for reclamation shall be cut down to a stump height of 6 inches or less prior to other heavy equipment operation. These trees shall be cut in four foot lengths (down to 4 inches diameter) and placed in manageable stacks immediately adjacent to a public road to facilitate removal for company use or removal by the public.

RANGELAND MANAGEMENT

Affected Environment: The proposed well pad and access route are located within the McAndrews Gulch grazing allotment (06600). Authorized livestock use within this allotment is shown in Table 8.

Table 8. Authorized use Within the McAndrews Gulch Allotment (06600)

Livestock		Grazing Period		%Public Land	Authorized Use (AUMs)
Number	Kind	Begin	End		
150	Cattle	4/15	5/14	74	109
250	Cattle	5/15	10/31	74	1034
260	Cattle	11/1	1/15	74	481

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action would result in a short-term loss of less than two Animal Unit Months (AUMs) of livestock forage. This initial loss of forage would be considered short term, if revegetation is prompt and effective there would be no net loss of livestock forage over the long term. Following successful revegetation of disturbance associated with well pad, road and pipeline construction, it is expected that forage available to livestock will increase slightly due to conversion of the disturbed area from a woodland dominated site to a grass/forb site which would potentially have higher forage production value for grazing animals. Three cattleguards are crossed along BLM road 1509, the proposed access route. The SUP indicates that any existing cattleguards will be repaired or replaced as necessary as a result of damage resulting from rig moves.

Cumulative Effects: Implementation of the Proposed Action in conjunction with existing and future uses is not expected to impede or affect the proper management of livestock on rangelands within the grazing allotment in which the Proposed Action occurs.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no change from the present situation.

Cumulative Effects: There would be no vegetation disturbing activities which would contribute to short term reduction of forage within the project area. There would be no potential for damage to range improvement projects as a result of the proposed project.

Mitigation:

1. Any range improvement projects such as fences, water developments, or other livestock handling/distribution facilities that are damaged or destroyed as a direct or indirect result of implementation of the Proposed Action shall be promptly repaired or replaced by the applicant to restore pre-disturbance functionality.

REALTY AUTHORIZATIONS

Affected Environment: The off-lease portions of the access road, water line, and natural gas pipeline will require ROWs; The following table describes the existing ROWs in the area of the proposed natural gas pipeline, water line, and access road.

Table 9. Existing ROWs in the Project Area

Case File	Holder	Authorized Use
COC26085B	ETC Canyon Pipeline, LLC	Natural gas pipeline
COC54858	Sonterra Energy LLC	Access road
COC66436	Dschaak Consulting LLC	Disposal well and access road
COC68753	NC Telecom	Aerial fiber optic cable
COC69536	Sonterra Energy LLC	Natural gas pipeline
COC72907	Rocky Mountain Power	Power line
COC011409	Northwest Pipeline	Natural gas pipeline

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Natural gas pipeline ROW COC75194 would be approximately 13,000 feet long, 25 feet wide, and contain 7.46 acres. Water line ROW COC75214 would be 13,000 feet long, 15 feet wide, and contain approximately 4.48 acres within the associated pipeline ROW. Temporary use permit (TUP) COC74194-01 would be 13,000 feet long, 25 feet wide, and contain approximately 7.46 acres for the additional work area necessary during construction of the pipeline and water line. Access road ROW COC75193 would be approximately 29,000 feet long, 50 feet wide, and contain 33.29 acres. The running surface of the access road would be 16 feet; however the design of the access road will require turnouts, water bars, drainage crossings, etc. Due to the road design features, a width of 50 feet would be authorized for the access road ROW. Construction of the proposed pipelines has the potential to intersect ROWs held by other parties, such as access roads and pipelines. Damage to the facilities or rights of existing ROW holders could occur if construction activities are not properly planned and other ROW facilities are not properly identified prior to construction. Damage to county roads from trenching and heavy equipment use may also occur. If accurate “as built” mapping is not provided to BLM, conflicts may develop in the future with other ROW holders.

Cumulative Effects: As the number of ROW holders in the project area increases so would competition for suitable locations for facilities. Increased ROW densities would also lead to a higher probability of conflict between ROW users.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: Failure to authorize the proposed project would not result in any increased impacts to realty authorizations in the area.

Cumulative Effects: There would not be any cumulative effects from not authorizing the proposed project.

Mitigation:

1. All activities would be required to comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This would include acquiring all required State and Rio Blanco County permits, implementing all applicable mitigation measures required by each permit, and effectively coordinating with existing facility ROW holders.
2. The holder shall provide the BLM Authorized Officer (AO) with data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the ROW and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in Universal Transverse Mercator (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 should be directed to WRFO BLM GIS staff at (970) 878-3800.
3. Construction activity should take place entirely within the areas authorized in the ROW grants and temporary use permit.
4. At least 90 days prior to termination of the right-of-way, the holder shall contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination and rehabilitation plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, and surface material (e.g., gravel or concrete), as well as final recontouring, spreading of topsoil, and seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination activities.
5. For the purpose of determining joint maintenance responsibilities, the holder shall make road use plans known to all other authorized users of the common access road. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreement entered into.

RECREATION

Affected Environment: The Proposed Action occurs within the White River Extensive Recreation Management Area (ERMA). The 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. The project site is located in the Recreation Opportunity Spectrum (ROS) classification area of Semi-Primitive Motorized. Areas within this

classification are characterized by a largely natural appearance and are accessible by foot, horseback, bike or motor vehicle generally on native-surfaced roads or gravel. Interaction with other visitors is relatively low. There are minimum on-site controls and restrictions, and the area provides for a moderate probability of experiencing isolation, remoteness, and closeness to nature. The primary recreation activity in this area is upland big game hunting. The Proposed Action is located within the Colorado Parks and Wildlife (CPW) Game Management Unit (GMU) 11, which is a popular big game hunting area where the hunter has good opportunities to pursue both mule deer and elk.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: Due to the Proposed Action, there would be a direct disturbance of approximately 18.4 acres of land (not including acreage needed to upgrade BLM 1509 road) available for dispersed recreation during construction and operation. Some displacement of recreationists may occur during construction, particularly to those seeking a more primitive oriented backcountry recreation experience. Post construction, big game hunters are still expected to hunt in the general vicinity of the well assuming big game is present in the area. If pad development and drilling activities coincide with the various hunting seasons (late August through December), there may be a disruption to the hunting experience; however, this disruption will be temporary in nature and of short duration. As such, this could be considered a minor impact.

Cumulative Effects: There is currently not a lot of energy development within the vicinity of the proposed well pad (there is one shut-in well and three plugged and abandoned wells within 1.5 miles of the Proposed Action), so even if activity associated with construction and drilling activities were to disrupt big game hunters or other recreationists, there would be other opportunities available within the Crooked Wash watershed.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no activities that would redirect recreational use in the area.

Cumulative Effects: None.

Mitigation:

1. Avoid, if possible, constructing well pads and roads during fall big game hunting seasons primarily in the months of October and November.

ACCESS AND TRANSPORTATION

Affected Environment: Access for the proposed well pad location will come in from the south, from Highway 64. From there, access will travel approximately 3.2 miles along Rio Blanco County Road 77 (Smizer Gulch) to the junction with BLM Road 1509 (Crooked Wash). Access will travel approximately 4.8 miles along BLM Road 1509 to the junction with the proposed 790 ft access road. Two stretches of BLM Road 1509, totaling 3,000 ft, would be upgraded. Traffic experienced in the area is related primarily to agricultural uses and hunting.

BLM 1509 is a graveled all weather route for the first mile then it is a seldom maintained natural surfaced route. Rio Blanco County Road 77 is an annually maintained route that is a mixture of natural and gravel surface that experiences use oil and gas use year around to access well pads to the east of the Proposed Action.

Environmental Consequences of the Proposed Action:

Direct and Indirect Effects: The Proposed Action will use BLM Road 1509 as the primary access route. The amount of traffic along this road will increase as construction begins, and the large trucks entering/leaving Highway 64 may temporarily interrupt the flow of traffic. The widening of and improvement to all weather conditions to the proposed well pad location may increase the amount of traffic in the area by the public. The improved route will allow the public to access the area in adverse weather conditions. Dust may increase during construction and during dry conditions that may impair visibility to see oncoming traffic and corners on steep slopes.

Cumulative Effects: The Proposed Action would not contribute substantially to the existing road network within the area. While BLM Road 1509 would be upgraded, only 790 ft of new access road is proposed.

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects: There would be no increase in traffic creating increased dust and interrupting the flow of traffic.

Cumulative Effects: None.

Mitigation: See Air Quality section for mitigation related to dust suppression on roads.

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- 2011 Class III Cultural Resources Inventory for the Proposed Coyote Basin 13-16-298 Well Location and Linear Route (2.1 miles) in Moffat and Rio Blanco Counties, Colorado for Mesa Energy Partners LLC. Grand River Institute, Grand Junction, Colorado. (11-11-33: SHPO #MC.LM.NR261)

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Hail, W. J., Jr

- 1973 Geologic Map of the Smizer Gulch Quadrangle, Rio Blanco and Moffat Counties, Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

Tweto, Ogden

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

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality; Surface and Ground Water Quality; Floodplains, Hydrology, and Water Rights; Soils	11/23/2011
Zoe Miller	Ecologist	Areas of Critical Environmental Concern; Special Status Plant Species; Forest Management	11/15/2011
Michael Selle	Archaeologist	Cultural Resources; Native American Religious Concerns; Paleontological Resources	11/22/2011
Tyrell Turner	Rangeland Management Specialist	Invasive, Non-Native Species; Vegetation; Rangeland Management	11/22/2011
Lisa Belmonte	Wildlife Biologist	Migratory Birds; Special Status Animal Species; Terrestrial and Aquatic Wildlife; Wetlands and Riparian Zones	11/28/2011
Christina Barlow	Natural Resource Specialist	Hazardous or Solid Wastes	11/29/2011
Chad Schneckenberger	Outdoor Recreation Planner	Wilderness; Visual Resources; Access and Transportation; Recreation,	11/29/2011
Will Hutto	Fuels Specialist	Fire Management	11/21/2011
Paul Daggett	Mining Engineer	Geology and Minerals	11/21/2011
Stacey Burke	Realty Specialist	Realty	11/17/2011
Melissa J. Kindall	Range Technician	Wild Horse Management	11/17/2011
Christina Barlow		Project Lead – Document Preparer	11/29/2011

Name	Title	Area of Responsibility	Date Signed
Heather Sauls	Planning & Environmental Coordinator	NEPA Compliance	11/29/2011

ATTACHMENTS:

Figure 1: Project Vicinity Map

Figure 2: Proposed Access

Figure 3: Proposed Pipeline

Figure 4: Proposed Road Upgrades on BLM Road 1509

Figure 1. Project Vicinity Map

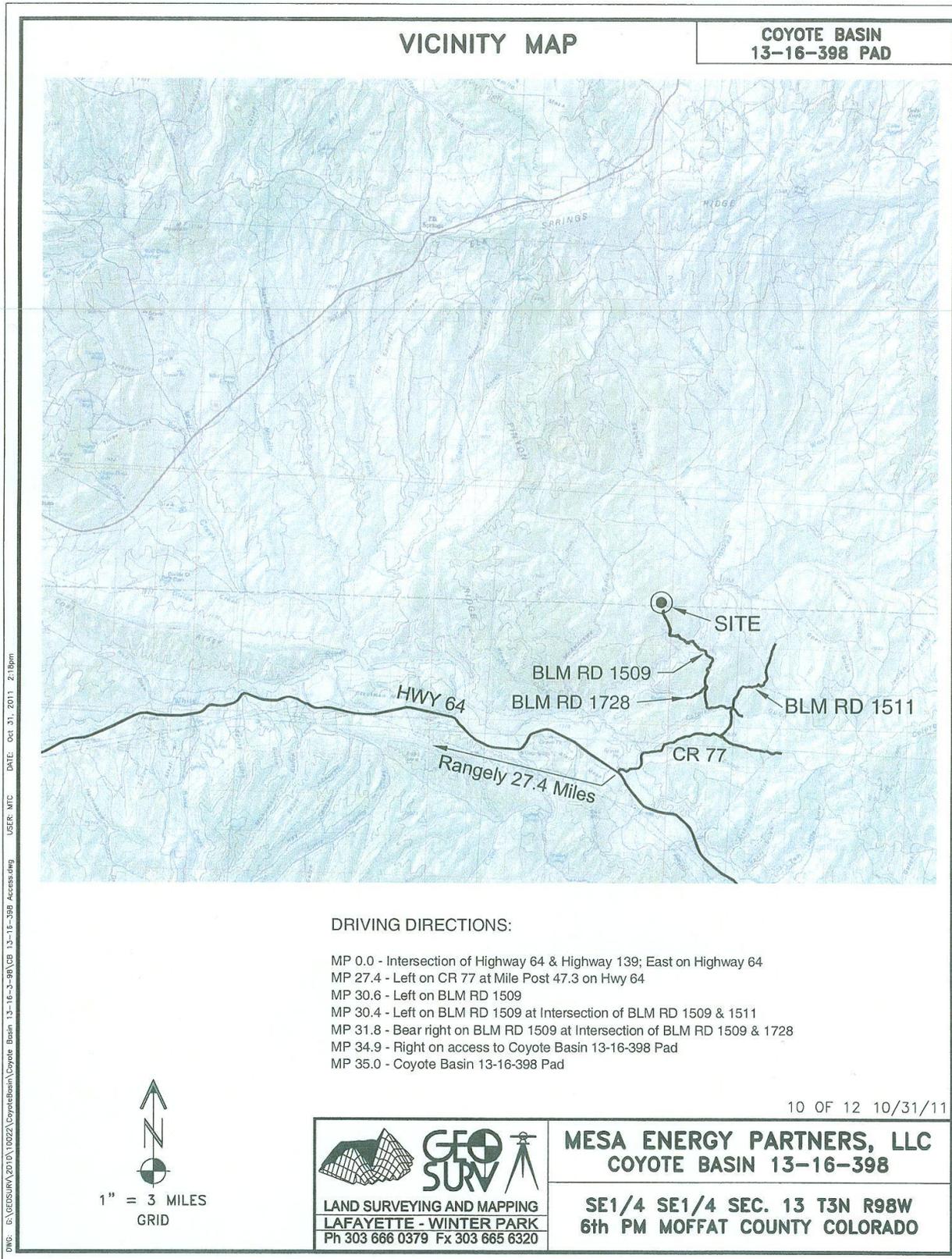
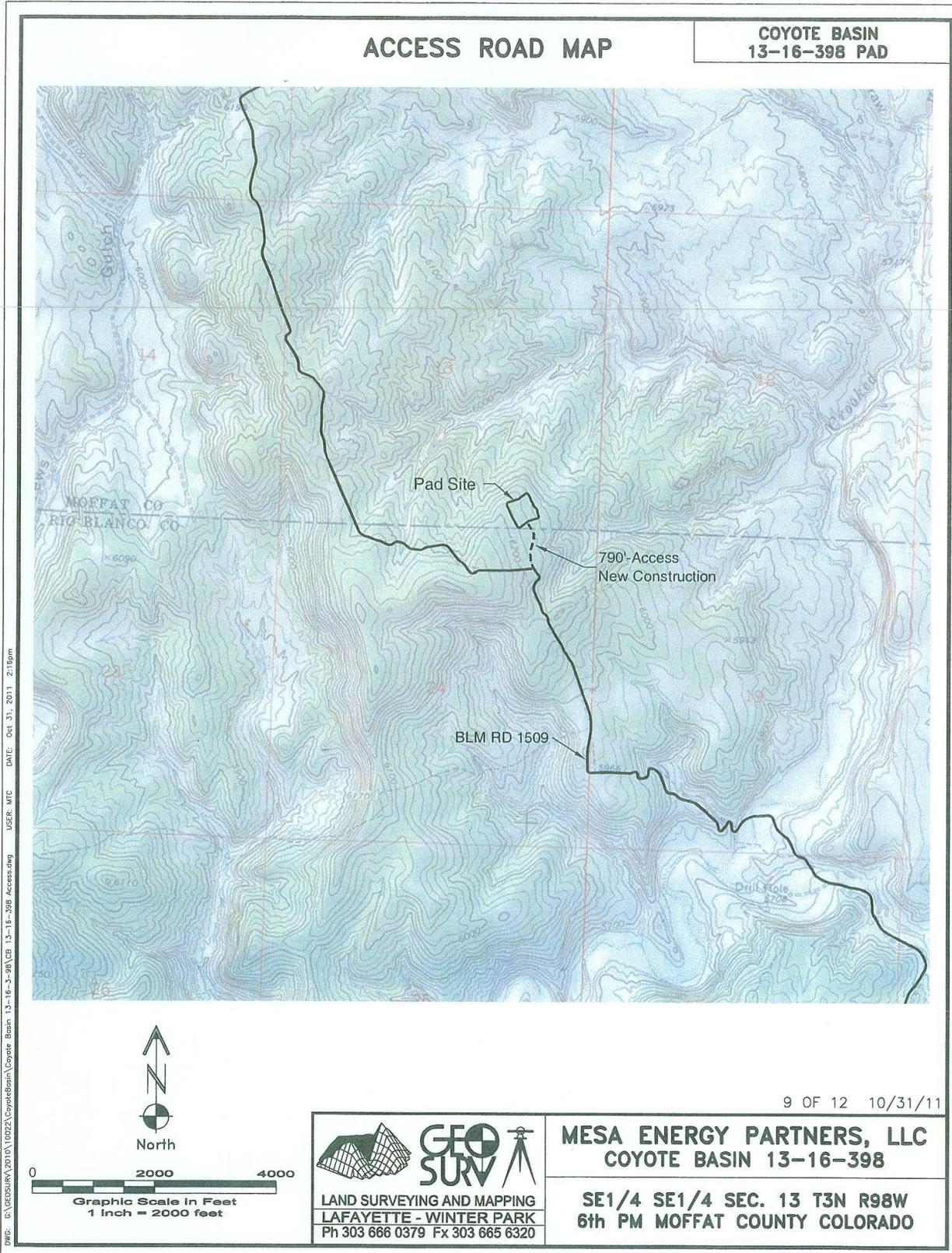


Figure 2. Proposed Access



*Note that red portions along BLM Road 1509 will require substantial road upgrades.

Figure 3. Proposed Pipeline

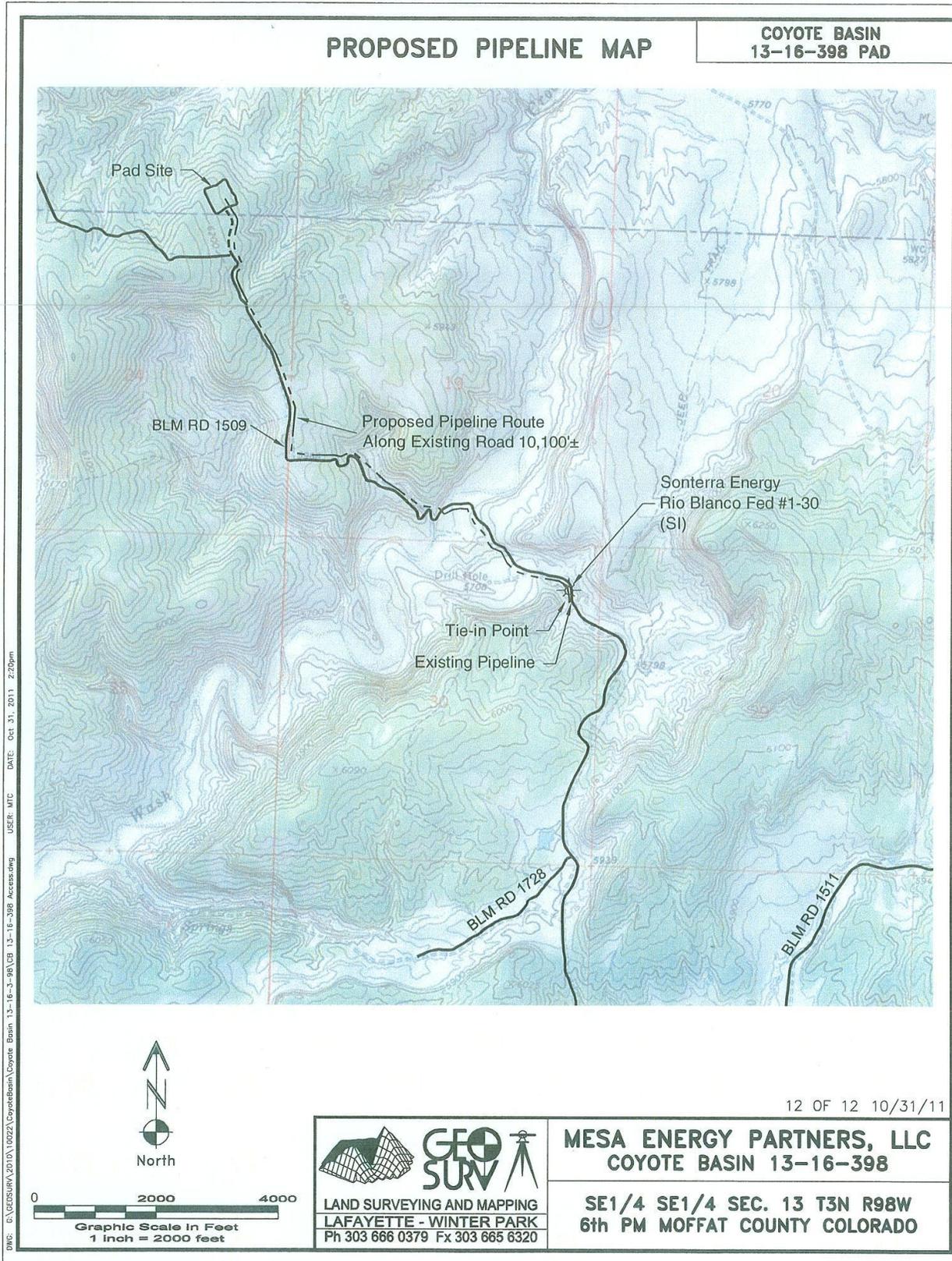
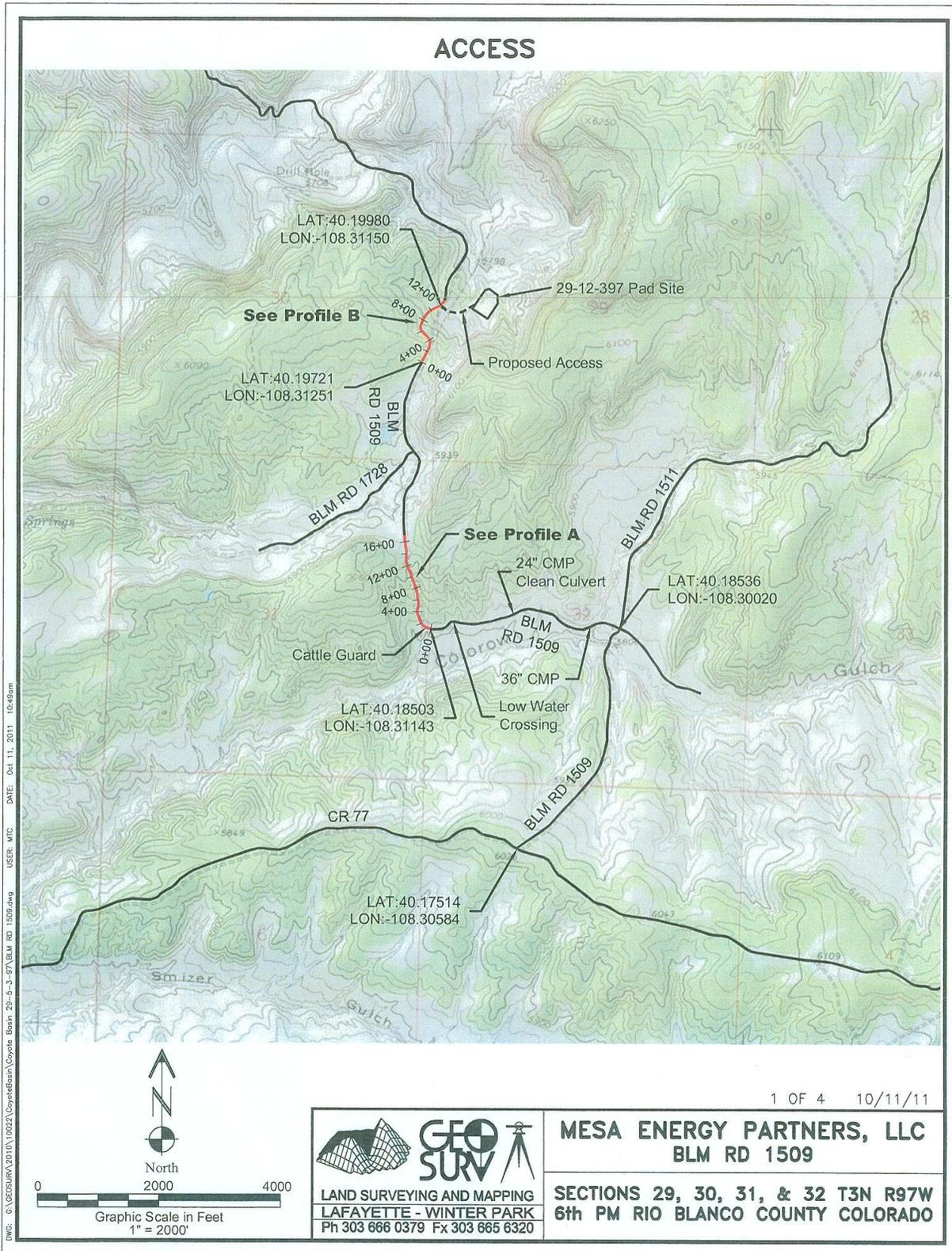


Figure 4. Proposed Road Upgrades on BLM Road 1509



*Note that portions of the road that must be upgraded are indicated in red.

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

**Finding of No Significant Impact (FONSI)
DOI-BLM-CO-110-2012-0008-EA**

BACKGROUND

Mesa Energy Partners LLC (Mesa) proposes to drill an oil/gas well on the undeveloped COC-65622 lease. The well pad would be approximately 320ftx400ft, or 2.94 acres. Stormwater features included, the total size of the well pad during the drilling completions phases would be 5.9 acres. All areas not needed for production would be reclaimed within six months of well completions, reducing the size of the well pad to approximately 1 acre. The existing BLM 1509 road would be used to access the well pad, and two stretches of road totaling approximately 3,000ft would need upgrade. A proposed 790ft access road would turn off of BLM Road 1509 to lead to the proposed well site. The access road would require a 50ft Right of Way (ROW) and would be reclaimed down to a 16ft ditched and crowned travel surface. The proposed pipeline would run alongside the proposed access road (for 790ft) and tie in at Sonterra's Energy Rio Blanco Fed #1-30 well site (located 10,100ft from the proposed pad center).

FINDING OF NO SIGNIFICANT IMPACT

Based upon a review of the EA and the supporting documents, I have determined that the Proposed Action is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined at 40 CFR 1508.27 and do not exceed those effects as described in the White River Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement (1996). Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below.

Context

The project is a site-specific action directly involving BLM administered public lands that do not in and of itself have international, national, regional, or state-wide importance. The lease area is relatively undeveloped so any impacts would be considered local, low intensity, and of short-duration.

Intensity

The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse. The depletion of the subsurface petroleum reservoir in general is a beneficial impact that adds to domestic energy reserves.

While surface impacts would be short-term and of low intensity, improper implementation of approved techniques for construction and reclamation has potential to adversely impact surface resources at a higher intensity and time duration than anticipated.

2. The degree to which the Proposed Action affects public health or safety.

There would be no impact to public health and safety if the safety measures described in the operator's drilling plan and SUP are properly implemented, and the developed mitigation is adhered to.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

No prime farmlands, parklands, or scenic rivers occur in the project area. Wetlands were identified within the project area where proposed upgrades to the existing road would occur. The operator will be required to work with the U.S. Army Corps of Engineers to obtain a permit for the road improvement; additionally, the BLM AO must approve an engineered road design before operations commence. Any impacts to the wetlands are not considered significant as they would be mitigated with a registered engineer project design and consistent with Army Corp of Engineers specifications. With the application of BMPs associated with soil erosion, there is no reasonable likelihood that fugitive sediments would have any measureable influence on the function or condition of on the Crooked Wash channel or its riparian resources.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial.

No comments or concerns have been received regarding possible effects on the quality of the human environment during the public comment period.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.

No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Proposed Action neither establishes a precedent for future BLM actions with significant effects nor represents a decision in principle about a future consideration. Similar proposals to drill have been evaluated and approved, so authorization to drill the proposed well would not set a precedent for future actions.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The proposed action includes utilization of existing pipeline infrastructure along the BLM 1509 road. Because the pipeline ROW would be shared, cumulative impacts in the relatively undeveloped area are reduced.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

A Class III inventory identified no

new cultural resources in the proposed project area. Potential for any impacts to known cultural sites along BLM road 1509 have been mitigated.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973. No special status plant species concerns have been identified. Mitigation is provided to reduce impact to special status animal species.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Neither the Proposed Action nor impacts associated with it violate any laws or requirements imposed for the protection of the environment.

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Ester McCullough
for Field Manager

DATE SIGNED: 11/30/2011

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

DECISION RECORD

PROJECT NAME: Mesa Energy Lease Obligation Well

ENVIRONMENTAL ASSESSMENT NUMBER: DOI-BLM-CO-2011-0008-EA

DECISION

It is my decision to implement the Proposed Action (Alternative A), as mitigated in DOI-BLM-CO-2011-0008-EA, authorizing the construction, drilling, operations, and maintenance of the proposed well and associated access road and pipelines.

Mitigation Measures

Air Quality or OTHER Resources

1. The operator shall employ dust suppression techniques as outlined in the surface use plan whenever there is a visible dust trail behind vehicles during the construction and drilling phases of the Proposed Action. Any technique other than the use of freshwater as a dust suppressant on BLM lands will require prior written approval from BLM.

Realty, Access and Transportation

2. All activities would be required to comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This would include acquiring all required State and Rio Blanco County permits, implementing all applicable mitigation measures required by each permit, and effectively coordinating with existing facility ROW holders.
3. The holder shall provide the BLM Authorized Officer (AO) with data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the ROW and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in Universal Transverse Mercator (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 should be directed to WRFO BLM GIS staff at (970) 878-3800.

4. Construction activity should take place entirely within the areas authorized in the ROW grants and temporary use permit.
5. At least 90 days prior to termination of the right-of-way, the holder shall contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination and rehabilitation plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, and surface material (e.g., gravel or concrete), as well as final recontouring, spreading of topsoil, and seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination activities.
6. For the purpose of determining joint maintenance responsibilities, the holder shall make road use plans known to all other authorized users of the common access road. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreement entered into.

Wildlife

7. Vegetation removal associated with well pad, road and pipeline development will take place outside the migratory bird nesting season of May 15 through July 15. Earthwork associated with the Proposed Action will be permitted from July 16 through May 14.
8. 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 migratory waterfowl, shorebirds, wading birds and raptors during completion and after completion activities have ceased. Methods may include netting 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.

Recreation

9. Avoid, if possible, constructing well pads and roads during fall big game hunting seasons primarily in the months of October and November.

Reclamation

10. A minimum of six inches of topsoil will be salvaged and stored undisturbed, covered with erosion fabric, and seeded to preserve the soil characteristics for interim reclamation.
11. Due to the nature of the soil conditions on the pad site, the travel portion of the production site will be graveled.
12. In addition to the design features submitted by the applicant in the SUP, the applicant shall use seed that is certified and free of noxious weeds. 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 (SN). 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.

13. BLM also recommends using seed mix #5 listed below where the proposed pipeline crosses Crooked Wash.

Table 6. Native Seed Mix #5			
Cultivar	Species	Scientific Name	Application Rate (lbs. PLS/acre)
Magnar	Basin Wildrye	Leymus cinereus	3.5
Rosanna	Western Wheatgrass	Pascopyrum smithii	3.5
San Luis	Slender Wheatgrass	Elymus trachycaulus ssp. trachycaulus	3
Critana	Thickspike Wheatgrass	Elymus lanceolatus ssp. lanceolatus	3
Timp	Northern Sweetvetch	Hedysarum boreale	4.5
Maple Grove	Lewis Flax	Linum lewisii	1
Alternates:			
Sodar	Streambank Wheatgrass	Elymus lanceolatus ssp. psammophilus	3
	Scarlet Globemallow	Sphaeralcea coccinea	0.5

Water Resources

14. To protect surface waters below the project area, keep road inlet and outlet ditches, sediment retention basins, and culverts free of obstructions, particularly before and during spring run-off and summer convective storms. Provide adequate drainage spacing to avoid accumulation of water in ditches or road surfaces. Install culverts with adequate armoring of inlet and outlet. Patrol areas susceptible to road or watershed damage during periods of high runoff.
15. When drilling to set the surface casing, drilling fluid will be composed only of fresh water, bentonite, and/or a benign lost circulation material that does not pose a risk of harm to human health or the environment (e.g., cedar bark, shredded cane stalks, mineral fiber and hair, mica flakes, ground and sized limestone or marble, wood, nut hulls, corncobs, or cotton hulls).
16. Prior to commencing construction, an engineering design for the access road must be received and approved by the BLM. This engineering design must be approved by a Colorado licensed professional engineer and include specifications for the Crooked Wash Crossing, all drainage features for the road and modifications planned for increasing the turning radius and reducing the grade to below 10 percent in sections proposed in the preliminary design submitted by Mesa Energy. This design should include peak stormflow calculations for the 10 and 25 year events for the crossing at Crooked Wash along with methods used for calculations.

Paleontological Resources

17. Mesa is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate

fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.

18. If any paleontological resources are discovered as a result of operations under this authorization, Mesa or any of its agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.
19. Any excavations into the underlying native sedimentary stone must be monitored by a permitted paleontologist. The monitoring paleontologist must be present before the start of excavations that may impact bedrock.

Visual Resources

20. All permanent (onsite for six months or longer) structures, facilities and equipment on BLM lands placed above ground shall be painted BLM Standard Environmental Color Chart Juniper Green within six months of installation, unless otherwise directed by the White River Field Office Visual Resources Specialist.

Fire Management

21. No wind rows and large piles can be created. Only woody material that will be used for reclamation should be kept onsite. Useable firewood can be stacked along the road for the public to pick up, can be chipped to a cover less than 5 inches thick, or be removed unless used for reclamation. Also see Forest Management.
22. When working on lands administered by the BLM WRFO, notify Craig Interagency Dispatch (970-826-5037) in the event of any fire.
 - a) The reporting party will inform the dispatch center of fire location, size, status, smoke color, aspect, fuel type, and provide their contact information.
 - b) The reporting party, or a representative of, should remain nearby, in a safe location, in order to make contact with incoming fire resources to expedite actions taken towards an appropriate management response.
 - c) The applicant and contractors will not engage in any fire suppression activities outside the approved project area. Accidental ignitions caused by welding, cutting, grinding, etc. will be suppressed by the applicant only if employee safety is not endangered and if the fire can be safely contained using hand tools and portable hand pumps. If chemical fire extinguishers are used the applicant must notify incoming fire resources on extinguisher type and the location of use.
 - d) Natural ignitions caused by lightning will be managed by Federal fire personnel. If a natural ignition occurs within the approved project area, the fire may be initially contained by the applicant only if employee safety is not endangered. The use of

heavy equipment for fire suppression is prohibited, unless authorized by the Field Office Manager.

Forest Management

23. In accordance with the 1997 White River RMP/ROD, all trees removed in the process of construction shall be purchased from the BLM. Trees should first be used in reclamation efforts and then any excess material made available for firewood or other uses.
24. First, woody material will be chipped and stockpiled for later use in reclamation. Woods chips can be spread at a depth no greater than 4-5 inches. Woody materials, not used for woods chips, required for reclamation shall be removed in whole with limbs intact and shall be stockpiled along the margins of the authorized use area separate from the topsoil piles. Once the disturbance has been recontoured and reseeded, stockpiled woody material shall be scattered across the reclaimed area where the material originated. Redistribution of woody debris will not exceed 20 percent ground cover. Limbed material shall be scattered across reclaimed areas in a manner that avoids the development of a mulch layer that suppresses growth or reproduction of desirable vegetation. Woody material will be distributed in such a way to avoid large concentrations of heavy fuels and to effectively deter vehicle use.
25. Trees that must be removed for construction and are not required for reclamation shall be cut down to a stump height of 6 inches or less prior to other heavy equipment operation. These trees shall be cut in four foot lengths (down to 4 inches diameter) and placed in manageable stacks immediately adjacent to a public road to facilitate removal for company use or removal by the public.

Rangeland Management

26. Any range improvement projects such as fences, water developments, or other livestock handling/distribution facilities that are damaged or destroyed as a direct or indirect result of implementation of the Proposed Action shall be promptly repaired or replaced by the applicant to restore pre-disturbance functionality.

Solid and Hazardous Wastes

27. All lessees and/or operators and right-of-way holders shall comply with all federal, state and/or local laws, rules, and regulations, including but not limited to onshore orders and notices to lessees, addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.
28. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the BLM WRFO.
29. Through all phases of oil and gas exploration, development, and production, all lessees and/or operators and holders of rights-of-way shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing: 1) emissions, 2) fresh water use, and 3) utilization, production, and release of hazardous material.
30. All substances that pose a risk of harm to human health or the environment shall be stored in appropriate containers. Fluids that pose a risk of harm to human health or the environment, including but not limited to produced water, shall be stored in appropriate

containers and in secondary containment systems at 110% of the largest vessel's capacity. Secondary fluid containment systems, including but not limited to tank batteries shall be lined with a minimum 24 mil impermeable liner.

31. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials 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.
32. As a reasonable and prudent lessee/operator in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
33. As a reasonable and prudent lessees/operator and/or right-of-way holder in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or right-of-way holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility.
34. With the acceptance of this authorization, the commencement of operations under this authorization, or within thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the right-of-way holder and the lessee/operator, and through the right-of-way holder and lessee/operator, its agents, employees, subcontractors, successors and assigns, stipulate and agree to indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

COMPLIANCE WITH LAWS & CONFORMANCE WITH THE LAND USE PLAN

This decision is in compliance with the Endangered Species Act and the National Historic Preservation Act. It is also in conformance with the 1997 White River Record of Decision/Approved Resource Management Plan.

ENVIRONMENTAL ANALYSIS AND FINDING OF NO SIGNIFICANT IMPACT

The Proposed Action was analyzed in DOI-BLM-CO-2011-0008-EA and it was found to have no significant impacts, thus an EIS is not required.

PUBLIC INVOLVEMENT

Scoping was the primary mechanism used by the BLM to initially identify issues. Internal scoping was initiated when the project was presented to the White River Field Office (WRFO)

interdisciplinary team on 11/1/2011. External scoping was conducted by posting this project on the WRFO's on-line National Environmental Policy Act (NEPA) register on 11/8/2011.

RATIONALE

Analysis of the Proposed Action has concluded that there are no significant negative impacts and that it meets Colorado Standards for Public Land Health. Additionally, authorization to drill the proposed well would allow for the development of an oil and gas lease that would otherwise expire.

ADMINISTRATIVE REMEDIES

State Director Review

Under regulations addressed in 43 CFR 3165.3(b), any adversely affected party that contests a decision of the Authorized Officer may request an administrative review, before the State Director, either with or without oral presentation. Such request, including all supporting documentation, shall be filed in writing with the BLM Colorado State Office at 2850 Youngfield Street, Lakewood, Colorado 80215 within 20 business days of the date such decision was received or considered to have been received. Upon request and showing of good cause, an extension may be granted by the State Director. Such review shall include all factors or circumstances relevant to the particular case.

Appeal

Any party who is adversely affected by the decision of the State Director after State Director review, under 43 CFR 3165.3(b), of a decision may appeal that decision to the Interior Board of Land Appeals pursuant to the regulations set out in 43 CRF Part 4.

SIGNATURE OF AUTHORIZED OFFICIAL: Ester McCullough
for Field Manager

DATE SIGNED: 11/30/2011