

U.S. Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652

Section 390 Categorical Exclusions for Oil and Gas Development, Exclusion No. 1

NEPA LOG NUMBER: DOI-BLM-CO-N040-2014-0050-CX (390)

A. Background

Bureau of Land Management (BLM) Office: Colorado River Valley Field Office

CASEFILE/PROJECT NUMBER: COC24603 for Federal Lease.

PROPOSED ACTION TITLE/TYPE: Riley Gulch Road Crossing Repair on BLM Land Northwest of Parachute, Authorized by Sundry Notice.

LOCATION OF THE PROPOSED ACTION: Township 7 South (T7S), Range 96 West (R96W) Section 4, NW¼SW¼, Sixth Principal Meridian. The project area is 3 air-miles northwest of Parachute, Garfield County, Colorado (Figure 1). The elevation of the project area is approximately 5,650 feet.

DESCRIPTION OF THE PROPOSED ACTION:

Background: In December 2013, an Application for Permit to Drill (APD) was approved by BLM allowing WPX Energy Rocky Mountain LLC (“WPX”) to drill, complete and produce an exploratory horizontal oil and gas well from the existing, but expanded MV 28-4 pad located in lower Riley Gulch 3 air-miles northwest of Parachute, Colorado. To expand the existing pad, approximately 5.72 acres of surface area would be disturbed. An estimate of some 10,000 cubic yards (cy) of excess material must be hauled from the MV 28-4 pad site since there is limited stockpile space at the construction site. The plan outlined in the Surface Use Plan of Operations called for 10,000 cy of the excess material to be hauled (2.0 miles round-trip) in dump trucks east to the proposed Riley Gulch Frac Pad for storage during the MV 28-4 pad development (Figure 1). Some of the excess material to be stored at the proposed Riley Gulch Frac Pad location would be used to ultimately develop the COGCC-permitted facility in the future. These development actions were analyzed and addressed in the Environmental Assessment (EA) # DOI-BLM-CO-N040-2014-0001 for the MV 28-4 project.

In late summer 2013, an intense thunderstorm in the Riley Gulch watershed created a debris flow in the main gulch and side draws. This resulted in several road culverts being plugged and the Riley Gulch Access Road being washed over with debris from the failed culverts. The dual 3-foot diameter culverts under the Riley Gulch Road located about 0.5 mile west of the MV 28-4 pad at the base of the steep road grade called “Ant Hill” was one area seriously impacted by the storm runoff. The culverts were restored to functional operation within 2 weeks of the storm damage. A unique opportunity exists to use the excess material from the MV 28-4 construction work to improve travel safety on the Riley Gulch Road by (1) replacing the under-sized culverts with longer and larger diameter pipes, (2) elevating the roadway using a compacted fill across the two Riley Gulch culverts, and (3) improving the blind curve approach as the road transitions into the steep (16-20%) road grade up the Ant Hill.

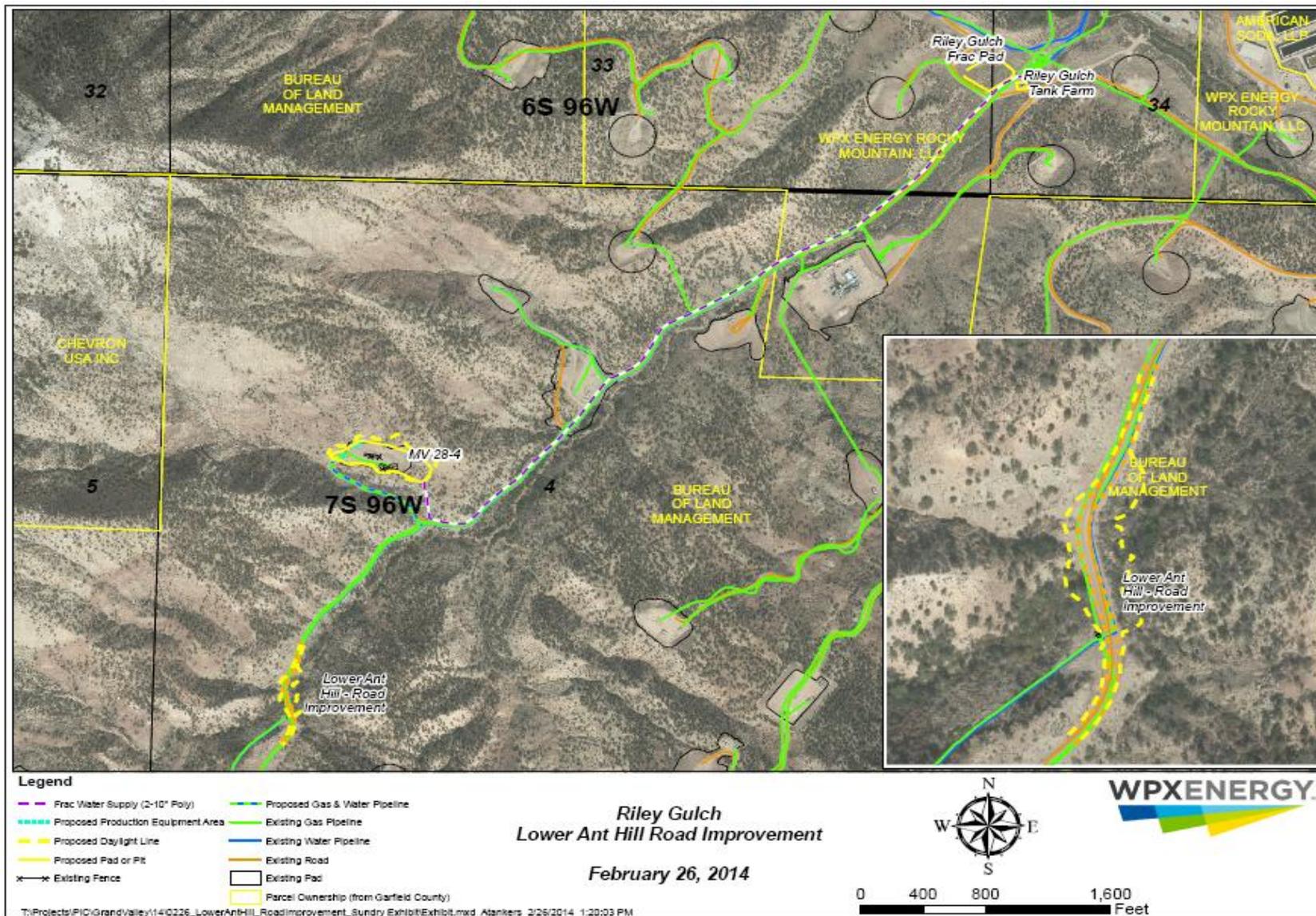


Figure 1. Riley Gulch Road Crossing Repair (identified as Lower Ant Hill Road Improvement on Insert Map)

Proposed Action: WPX proposes to perform road improvement and maintenance work at the Riley Gulch Road Crossing based on the road design specifications presented on the Project Plat (Figure 2) and Road Culvert Riprap Design (Figure 3). The work would involve:

- (1) Replacing two undersized culverts (36-inch diameter) with longer, wider diameter culverts and improved collection basins and rock armoring at the inlets and outlets. The existing buried water and natural gas pipelines that traverse through the project area, presumably located directly above the culverts, would be reestablished and, if necessary, re-buried in a manner that allows the pipelines to safely be placed above the new larger-diameter culverts.
- (2) Using excess material from the MV 28-4 construction work to raise and widen the roadway at the Riley Gulch Crossings based on specifications outlined in the project design.
- (3) Armoring the elevated fillslope on both sides of the road with boulders and rocks and/or installing boulder retaining wall sections to protect the roadfill from debris flow impacts on the west-side of the road and keep fill material from reaching Riley Gulch on the east-side of the road.
- (4) Establishing a truck turnout on the blind curve entering the steep grade of the Ant Hill (between Stations 5+50 and 6+75) to allow improved vehicle passage.
- (5) Capping the improved road segment including the truck turnout from Stations 0+00 to 7+00 with a minimum 6-inch lift of gravel.

The improved roadway (driving surface) would be 18 feet wide and 775 feet in length. The project area would encompass approximately 0.91 acre of total disturbance, with 0.31 acre covering the existing roadway and 0.60 acre accounting for new disturbance related to fillslope widening. Rock walls would be installed at the inlet and outlet side of culverts and be built across portions of the east-side fillslope to keep material from being deposited into Riley Gulch. No additional construction work would be necessary beyond the construction limits shown on Figure 2.

To construct the compacted fill section across the dual culverts, excess material would originate from the MV 28-4 pad construction work. The soil would either be hauled directly from the MV 28-4 construction site (0.4 mile one-way haul using end-dump trucks) or be hauled from the stockpile site at the Riley Gulch Frac Pad (1.5 mile one-way haul). The determining factor on the source of the fill material hinges on the timeframe for the approval of this SCX and associated BLM Sundry.

A biological survey of the project area was conducted in April 2013 for MV 34-5 pad development, with no findings of sensitive wildlife or botanical resources in the vicinity the proposed road improvements (WWE 2013). Project work on BLM land would be subject to a big game winter timing limitation identified in lease #COC24603 covering the period from January 1 to March 1.

Seven Class III (intensive pedestrian survey) cultural resource inventories (CRVFO# 1285A, 995, 1199, 1104-1, 1107-33, 1112-15, and 1112-17) have been conducted previously within the proposed project area for a variety of oil and gas related well pads, access roads, and/or pipelines. The cultural inventories and pre-field file searches of the Colorado SHPO database and BLM Colorado River Valley Field Office cultural records identified no historic properties within the project Area of Potential Effect (APE). Eligible or potentially eligible cultural sites are referred to in Section 106 of the National Historic Preservation Act as “historic properties.” Therefore, the BLM has made a determination of “**No Historic Properties Affected.**” This determination was made in accordance with the 2001 revised regulations [36CFR 800.4(d)(1)] for Section 106 of the National Historic Preservation Act (16U.S.C 470f), the BLM/State Historic Preservation Officer (SHPO) Programmatic Agreement and

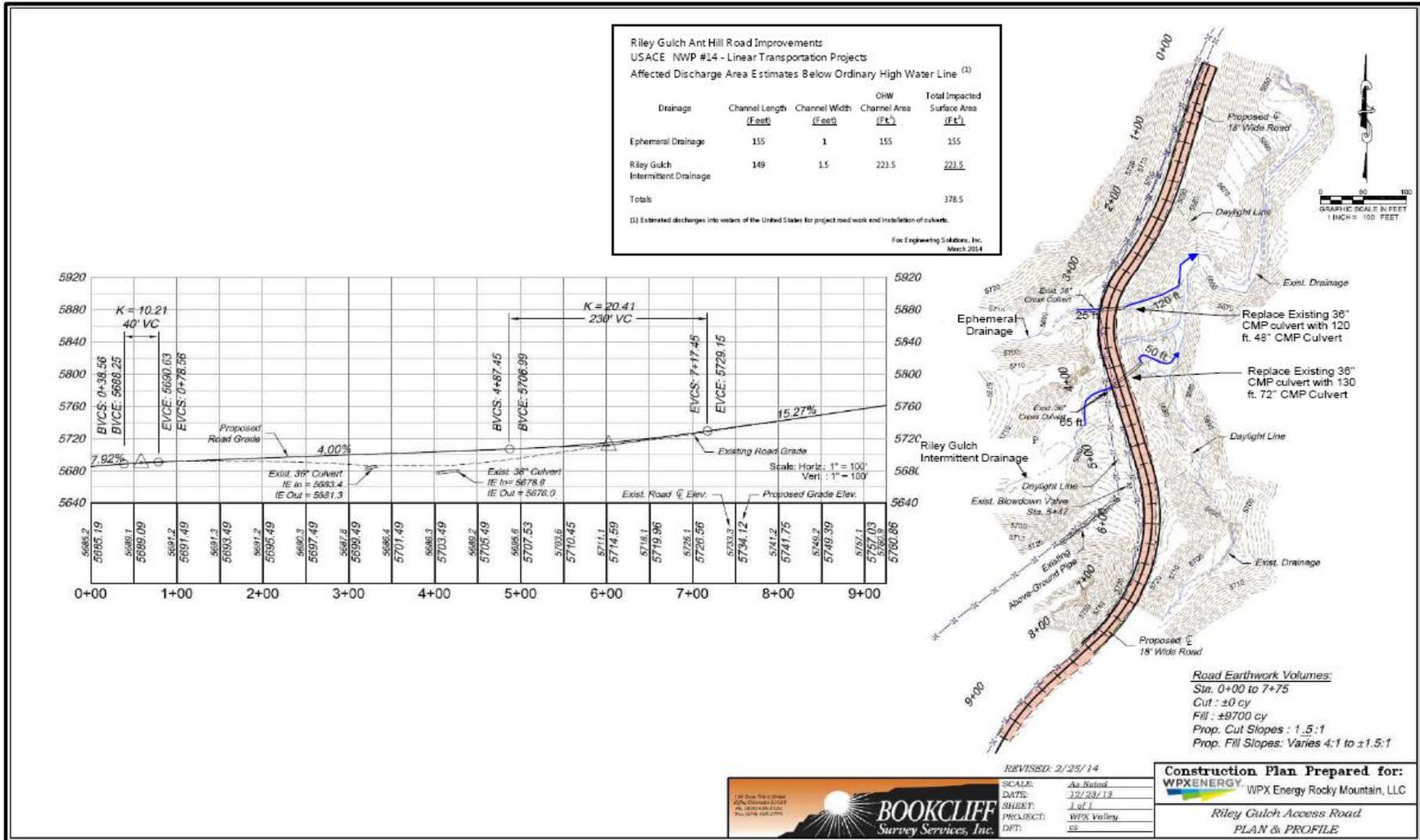


Figure 2. Road Construction Plat Showing the Proposed Road Culverts and Road Grade Improvements.

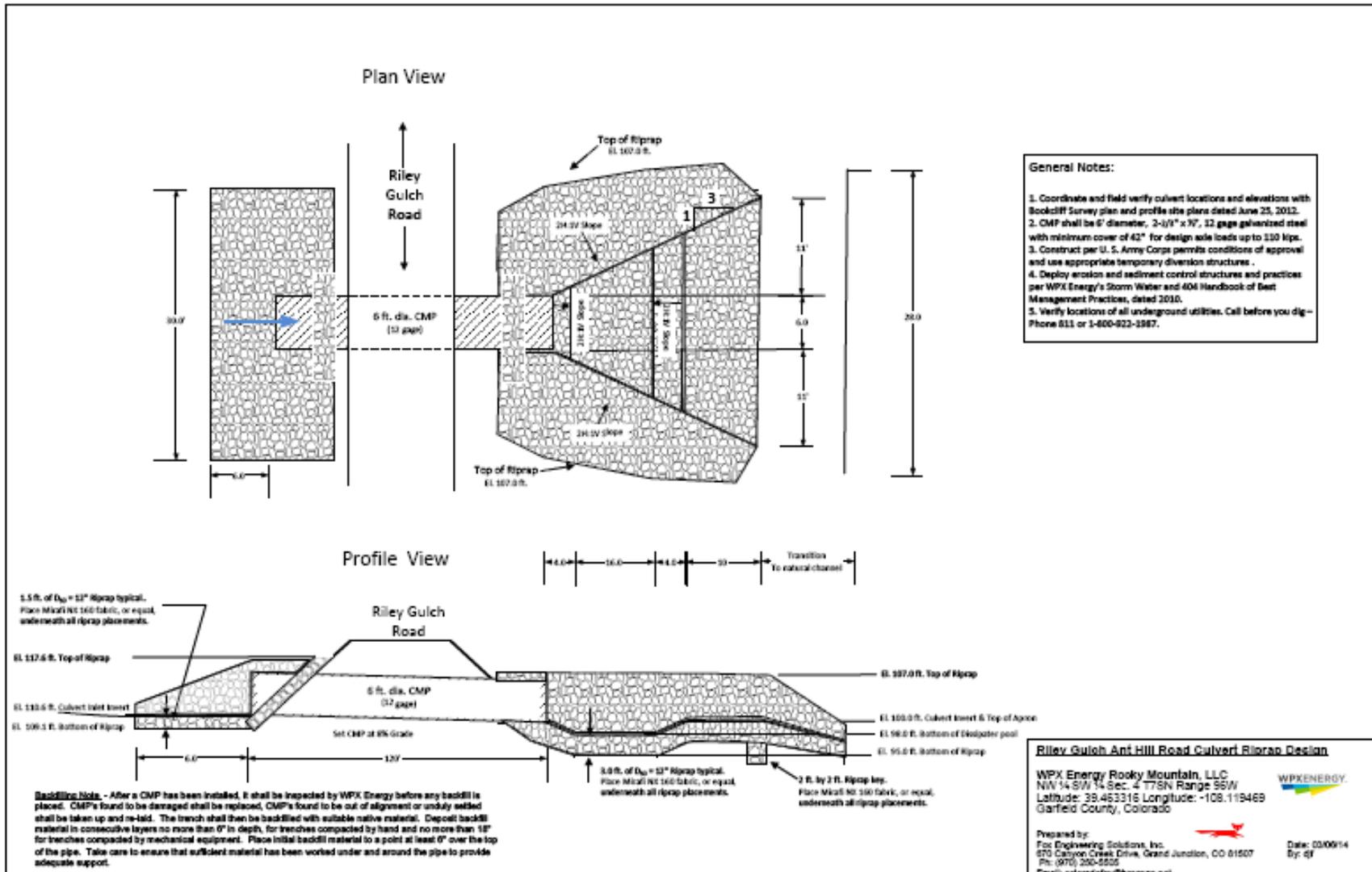


Figure 3. Road Culvert Riprap Design.

Colorado Protocol]. As the BLM has determined that the Proposed Action would have no direct impacts to known “historic properties,” no formal consultation was initiated with the SHPO.

The Proposed Action would involve the road improvements and reclamation of the disturbed road slopes. The work would adhere to the guidelines established in the BLM Gold Book, *Surface Operating Standards for Oil and Gas Exploration and Development* (USDI and USDA 2007) and presented on the specific road design drawing (Figures 2 and 3). A road maintenance program would be continue to be implemented on the Riley Gulch Road which includes, but is not limited to blading, ditching, culvert installation and cleanout, weed control, and gravel surfacing where excessive rutting or erosion may occur.

The Proposed Action would be implemented consistent with the Federal oil and gas lease, Federal regulations (43 CFR 3100), and the operational measures included in the BLM Sundry Notice. Attachment A lists the general and site-specific Conditions Approval to be implemented as mitigation measures for this project. The operator would be responsible for continuous inspection and maintenance of the access road.

B. Land Use Plan Conformance

Land Use Plan (LUP) Name: The current land use plan is the *Glenwood Springs Resource Management Plan* (RMP) (BLM 1984, revised 1988). Relevant amendments include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999).

Date Approved/Amended: *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) – approved November 27, 1991; *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999) – approved March 24, 1999.

Determination of Conformance: The Proposed Action is in conformance with the 1991 and 1999 RMP amendments cited above because the Federal mineral estate proposed for development was designated as open to oil and gas leasing and development, and Federal lease COC24603 was duly leased pursuant to the 1999 RMP amendment. The proposed project is of a type specifically contemplated and analyzed in the 1999 RMP amendment and that it is in conformance because the stipulations specified in the 1999 RMP amendment were attached to the lease and incorporated into the project design. The Proposed Action is therefore in conformance with the current land use plan, as amended.

C. Compliance with NEPA

Consistency with CX Category #1: *Individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.* All questions listed in Table 1 must be answered “Yes” to use this Section 390 CX.

NEPA Document Name: The South Grand Valley Geographic Area Plan (EA #CO140-2004-0034, approved on April 13, 2004) identified the existing well pads, roads and various pipeline connections serving the affected pads. That EA satisfies the criteria of being an activity-level or project-level EIS or EA that is applicable to the Proposed Action.

Table 1. Project Screening Questions		Yes	No
1.	Would the proposed action disturb less than 5 acres?	<u>Yes</u>	
2.	Is the current amount of surface disturbance on the entire leasehold, plus the proposed action, less than 150 acres? (See Figure 4)	<u>Yes</u>	
3.	Was the proposed action adequately analyzed in an existing site-specific National Environmental Policy Act (NEPA) document?	<u>Yes</u>	

Persons and/or Agencies Consulted:

WPX: April Mestas, Adam Tankersley, Wayne Gallahan, Wally Hammer, Ashlee Lane, Dave Fox

Interdisciplinary Review: BLM staff from the CRVFO listed in Table 2 participated in the preparation of this Section 390 CX, including review of resource survey results submitted by the Operator’s consultants, evaluation of impacts likely to occur from implementation of the proposed action, and identification of appropriate COAs.

Table 2. BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
John Brogan	Archaeologist	Cultural Resources, Native American Religious Concerns
Jim Byers	Natural Resource Specialist	EA Project Lead, Access & Transportation, Socioeconomics, Wastes-Hazardous or Solid,
Allen Crockett, Ph.D., J.D.	Supervisory NRS	NEPA Review
Shauna Kocman, Ph.D., P.E.	Hydrologist	Air Quality, Noise, Soils, Surface Water, Waters of the U.S.
Julie McGrew	Natural Resource Specialist	Visual Resources
Judy Perkins, Ph.D.	Botanist	Invasive Non-native Species, Special-status Species (Plants), Vegetation
Sylvia Ringer	Wildlife Biologist	Migratory Birds, Special-status Species (Animals), Wildlife, Aquatic and Terrestrial

The Proposed Action was presented to the Colorado River Valley Field Office interdisciplinary team for SCX review on February 27, 2014.

MITIGATION: Conditions of Approval to be attached to the BLM Sundry Notice for the Riley Gulch Road Crossing Repairs are listed in this Section 390 CX.

Name of Preparers: Jim Byers, Natural Resource Specialists Date Prepared: February 26, 2014

REFERENCES CITED:

U.S. Department of the Interior and U.S. Department of Agriculture (USDI and USDA). 2007. Surface operating standards and guidelines for oil and gas exploration and development. The Gold Book.

WestWater Engineering. 2013 MV 28-4 and MV 34-5 Project Biological Survey Report. May 2013.

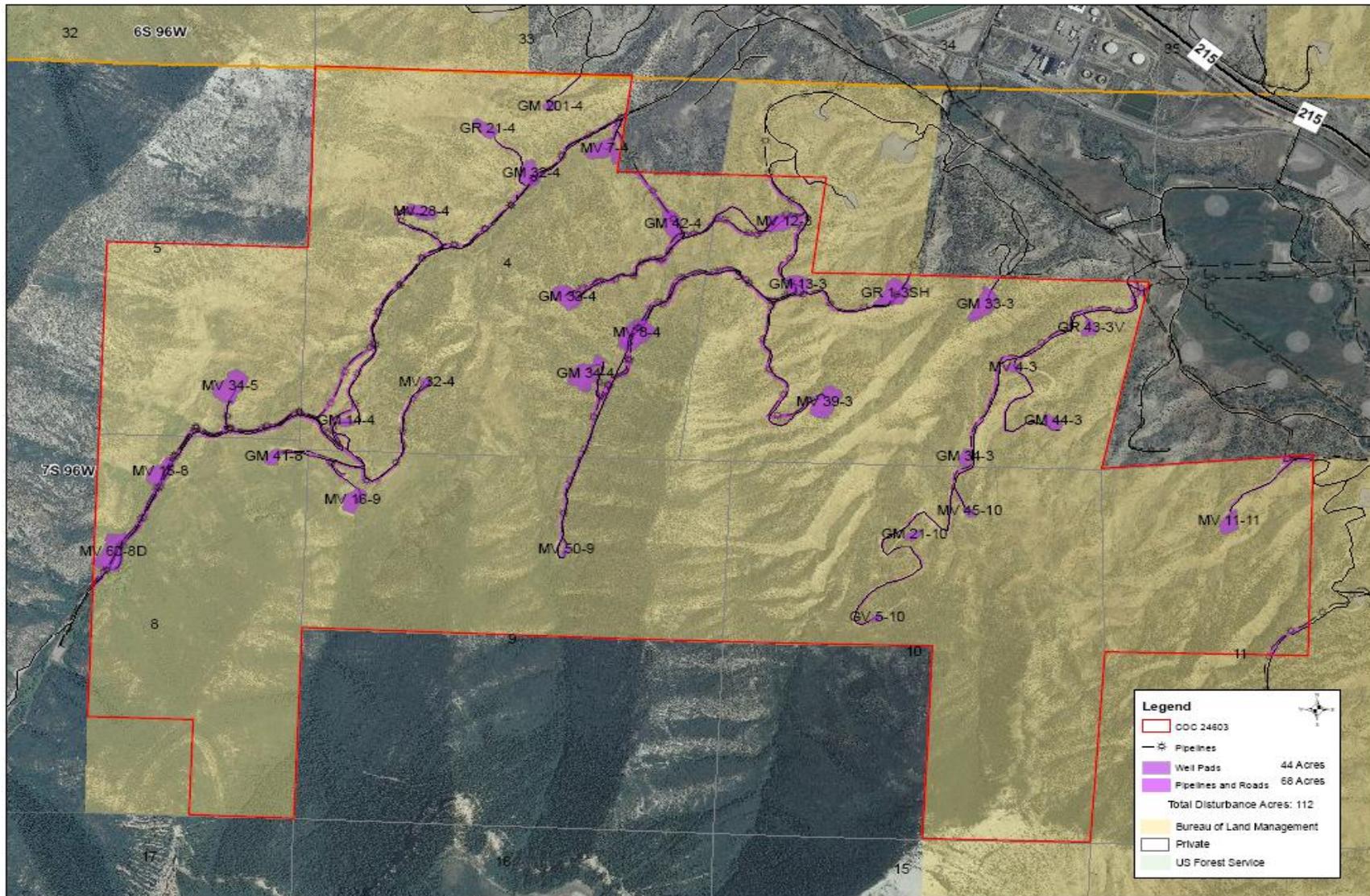


Figure 4. Disturbance Acreage for Federal Lease COC24603

D. Signature

The Proposed Action is statutorily categorically excluded from further NEPA documentation in accordance with Section 390 (b)(1) of the Energy Policy Act of 2005, which provides for such exclusion of individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed. Acres of surface disturbance on Federal lease COC24603 are shown on Figure 4.

Authorizing Official:  Date: 3-20-14

E. Decision and Rationale for Action

I have decided to approve the BLM Sundry Notice for the Riley Gulch Road Crossing Repair with the attached Conditions of Approval (COAs). The COAs are required by this decision, and variance from these COAs during project implementation may require further NEPA review. I have reviewed Section C, Land Use Plan Conformance and Compliance with NEPA, and have determined that the proposed activity is in conformance with the applicable land use plan(s) and referenced NEPA documents. I have also evaluated the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 has been correctly applied and that no further environmental analysis is required.

 3-20-14
Allen Crockett, Ph.D. Date
Supervisory Natural Resource Specialist

F. Administrative Review or Appeal Opportunities

Applications for Permit to Drill and Sundry Notices

Under BLM regulations addressed in 43 CFR 3165, the decision to approve this Sundry Notice is subject to appeal and administrative review. An administrative review must be conducted in accordance with 43 CFR 3165.3, and must take place prior to pursuing an appeal to the Interior Board of Land Appeals.

Any adversely affected party may request an administrative review, before the State Director, either with or without oral presentation. Such a request must include information required under 43 CFR 3165.3(b) (State Director Review (SDR)), including all supporting documentation. Such a request must be filed in writing with the *BLM Colorado State Director, 2850 Youngfield Street, Lakewood, CO 80215* within 20 business days of the date the decision is received, or considered to have been received. Upon request and showing of good cause, an extension for submitting supporting/additional data may be granted by the State Director.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals in accordance with 43 CFR 3165.4.

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Conditions of Approval
WPX Energy Rocky Mountain LLC
Riley Gulch Road Crossing Repair

1. Administrative Notification. WPX Energy Rocky Mountain LLC (“WPX”) shall notify the BLM Authorized Officer (AO) at least 48 hours prior to initiation of construction. If requested by the BLM, the operator shall first schedule a preconstruction meeting, including key operator and contractor personnel, to ensure that any unresolved issues are fully addressed prior to initiation of project work and review the COAs of the Sundry Notice as well as required safety regulations, if appropriate.
2. Culvert Replacement and Road Improvement Details. WPX shall perform culvert replacements and road improvement work at the Riley Gulch Road Crossing based on the road design specifications presented on Bookcliff’s project plat (Figure 2) and Fox Engineering Solution’s Road Culvert Riprap Design (Figure 3). The work shall include:
 - (a) replacing 2 under-sized culverts (36-inch diameter) with longer, wider diameter culverts and improved collection basins and rock armoring at the inlets and outlets. The existing buried water and natural gas pipelines that traverse through the project area, presumably located directly above the culverts shall be re-established and, if necessary, re-buried in a manner that allows the pipelines to safely be placed above the new larger-diameter culverts;
 - (b) using excess material from the MV 28-4 construction work to raise and widen the roadway at the Riley Gulch Crossings based on specifications outlined in the project design;
 - (c) armoring the elevated fillslope on either side of the road with boulders and rocks to protect the roadfill from debris flow impacts on the west-side of the road and keep fill material from reaching Riley Gulch on the east-side of the road;
 - (d) establishing a truck turnout on the blind curve entering the steep grade of the Ant Hill (between Stations 5+50 and 6+75) to allow improved vehicle passage; and
 - (e) capping the improved road segment including the truck turnout from Stations 0+00 to 7+00 with a minimum 6-inch lift of gravel.

The improved roadway (driving surface) shall be 18 feet wide and 775 feet in length. The project area shall encompass approximately 0.91 acres of total disturbance with 0.31 acres covering the existing roadway and 0.60 acres accounting for new disturbance related to fillslope widening.

To construct the compacted fill section across the dual culverts, excess material shall originate from the MV 28-4 pad construction work. The soil shall either be hauled directly from the MV 28-4 construction site (0.4 mile one-way haul using end-dump trucks) or be hauled from the stockpile site at the Riley Gulch Frac Pad (1.5 mile one-way haul). The determining factor on the source of the fill material shall hinge on the timeframe for the approval of this SCX and associated BLM Sundry.

3. Saturated Soil Conditions. When saturated soil conditions occur on or along the proposed right-of-way, the construction work shall be halted until soil material dries out or is frozen sufficiently for construction to proceed without undue damage and erosion to soils.
4. Dust Abatement. The operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events. The BLM may direct the operator to change the level and type of treatment (watering or application of various dust agents,

surfactants, and road surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust.

5. Drainage Crossings and Culverts. Construction activities at perennial, intermittent, and ephemeral drainage crossings (e.g. burying pipelines, installing culverts) shall be timed to avoid high flow conditions. Construction that disturbs any flowing stream shall utilize either a piped stream diversion or a cofferdam and pump to divert flow around the disturbed area.

Culverts at drainage crossings shall be designed and installed to pass a 25-year or greater storm event. On perennial and intermittent streams, culverts shall be designed to allow for passage of aquatic biota. The minimum culvert diameter in any installation for a drainage crossing or road drainage shall be 24 inches. Crossings of drainages deemed to be jurisdictional waters of the U.S. pursuant to Section 404 of the Clean Water Act may require additional culvert design capacity. Due to the flashy nature of area drainages and anticipated culvert maintenance, the U.S. Army Corps of Engineers (USACE) recommends designing drainage crossings for the 100-year event. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 15 or mark.a.gilfillan@usace.army.mil.

Pipelines installed beneath stream crossings shall be buried at a minimum depth of 4 feet below the channel substrate to avoid exposure by channel scour and degradation. Following burial, the channel grade and substrate composition shall be returned to pre-construction conditions.

6. Jurisdictional Waters of the U.S. The operator shall obtain appropriate permits from the U.S. Army Corps of Engineers (USACE) prior to discharging fill material into Waters of the U.S. in accordance with Section 404 of the Clean Water Act. Waters of the U.S. are defined in 33 CFR Section 328.3 and may include wetlands as well as perennial, intermittent, and ephemeral streams. Permanent impacts to jurisdictional waters may require mitigation. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17 or mark.a.gilfillan@usace.army.mil. Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.
7. Reclamation. The goals, objectives, timelines, measures, and monitoring methods for final reclamation of oil and gas disturbances are described in Appendix I (Surface Reclamation) of the 1998 Draft Supplemental EIS (DSEIS). Specific measures to follow during interim reclamation are described below.
 - a. Reclamation Plans. In areas that have low reclamation potential or are especially challenging to restore, reclamation plans will be required prior to APD approval. The plan shall contain the following components: detailed reclamation plans, which include contours and indicate irregular rather than smooth contours as appropriate for visual and ecological benefit; timeline for drilling completion, interim reclamation earthwork, and seeding; soil test results and/or a soil profile description; amendments to be used; soil treatment techniques such as roughening, pocking, and terracing; erosion control techniques such as hydromulch, blankets/matting, and wattles; and visual mitigations if in a sensitive VRM area.
 - b. Deadline for Interim Reclamation Earthwork and Seeding. Interim reclamation to reduce a well pad to the maximum size needed for production, including earthwork and seeding of the interim reclaimed areas, shall be completed within 6 months following completion of the last well planned to be drilled on that pad as part of a continuous operation. If a period of greater than one year is expected to occur between drilling episodes, BLM may require implementation of all or part of the interim reclamation program.

Reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, and of topsoil piles and berms, shall be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 shall be seeded during the remainder of the early winter season instead of during the following spring, unless BLM approves otherwise based on weather. If road or pipeline construction occurs discontinuously (e.g., new segments installed as new pads are built) or continuously but with a total duration greater than 30 days, reclamation, including seeding, shall be phased such that no portion of the temporarily disturbed area remains in an unreclaimed condition for longer than 30 days. BLM may authorize deviation from this requirement based on the season and the amount of work remaining on the entirety of the road or pipeline when the 30-day period has expired.

If requested by the project lead NRS for a specific pad or group of pads, the operator shall contact the NRS by telephone or email approximately 72 hours before reclamation and reseeding begin. This will allow the NRS to schedule a pre-reclamation field visit if needed to ensure that all parties are in agreement and provide time for adjustments to the plan before work is initiated.

The deadlines for seeding described above are subject to extension upon approval of the BLM based on season, timing limitations, or other constraints on a case-by-case basis. If the BLM approves an extension for seeding, the operator may be required to stabilize the reclaimed surfaces using hydromulch, erosion matting, or other method until seeding is implemented.

- c. Topsoil Stripping, Storage, and Replacement. All topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. In areas of thin soil, a minimum of the upper 6 inches of surficial material shall be stripped. The BLM may specify a stripping depth during the onsite visit or based on subsequent information regarding soil thickness and suitability. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation.
- d. Seedbed Preparation. For cut-and-fill slopes, initial seedbed preparation shall consist of backfilling and recontouring to achieve the configuration specified in the reclamation plan. For compacted areas, initial seedbed preparation shall include ripping to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces shall be covered evenly with topsoil.

Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than 1 day prior to seeding to break up any crust that has formed.

If directed by the BLM, the operator shall implement measures following seedbed preparation (when broadcast-seeding or hydroseeding is to be used) to create small depressions to enhance capture of moisture and establishment of seeded species. Depressions shall be no deeper than 1 to 2 inches and shall not result in piles or mounds of displaced soil. Excavated depressions shall not be used unless approved by the BLM for the purpose of erosion control on slopes. Where excavated depressions are approved by the BLM, the excavated soil shall be placed only on the downslope side of the depression.

If directed by the BLM, the operator shall conduct soil testing prior to reseeding to identify if and what type of soil amendments may be required to enhance revegetation success. At a minimum,

the soil tests shall include texture, pH, organic matter, sodium adsorption ratio (SAR), cation exchange capacity (CEC), alkalinity/salinity, and basic nutrients (nitrogen, phosphorus, potassium [NPK]). Depending on the outcome of the soil testing, the BLM may require the operator to submit a plan for soil amendment. Any requests to use soil amendments not directed by the BLM shall be submitted to the CRVFO for approval.

- e. Seed Mixes. A seed mix consistent with BLM standards in terms of species and seeding rate for the specific habitat type shall be used on all BLM lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated October 23, 2012).

For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. The seed shall contain no prohibited or restricted noxious weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed may contain up to 2.0 percent of “other crop” seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. Seed tags or other official documentation shall be submitted to BLM at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

- f. Seeding Procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation.

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover or by hydroseeding and hydromulching. Hydroseeding and hydromulching shall be conducted in two separate applications to ensure adequate contact of seeds with the soil.

If interim revegetation is unsuccessful, the operator shall implement subsequent reseeding until interim reclamation standards are met.

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil.

NOTE: Mulch is not required in areas where erosion potential mandates use of a biodegradable erosion-control blanket (straw matting).

- h. Erosion Control. Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other BMPs approved by the BLM. Additional BMPs such as biodegradable wattles, weed-free straw bales, or silt fences shall have be employed as necessary to reduce transport of sediments into the drainages. The BLM may, in areas with high erosion potential, require use of hydromulch or biodegradable blankets/matting to ensure adequate protection from slope erosion and offsite transport of sediments and to improve reclamation success.
- i. Site Protection. The pad shall be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species are firmly established, whichever comes later. The seeded species will be considered firmly established when at least 50 percent of the new plants are producing seed. The BLM will approve the type of fencing.

- j. Monitoring. The operator shall conduct annual monitoring surveys of all sites categorized as “operator reclamation in progress” and shall submit an annual monitoring report of these sites, including the monitoring methods used, to the BLM by **December 31** of each year. The monitoring program shall use the four Reclamation Categories defined in Appendix I of the 1998 DSEIS to assess progress toward reclamation objectives. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the report shall identify appropriate corrective actions. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the BLM.
8. Weed Control. The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Field Office *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports, including GPS shapefiles of treatment areas and Pesticide Application Records (PARs) (see the letter provided to operators dated February 27, 2014), shall be submitted to BLM by **December 1**.
9. Big Game Winter Range Timing Limitation. To minimize impacts to wintering big game, no construction, drilling or completion activities shall occur during a 60-day Timing Limitation (TL) period from **January 1 through March 1**. **Lease COC24603 has no winter TL stipulation.**
10. Bald and Golden Eagles. It shall be the responsibility of the operator to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, should be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative to the BLM Field Office (970-876-9051).
11. Raptor Nesting. Raptor nest surveys in the project vicinity on April 3, 7, and 11, 2013 did not result in location of raptor nest structures within 0.25 mile of a well pad or 0.125 mile of an access road, pipeline, or other surface facility associated with this project. Therefore, a 60-day raptor nesting TL is not required. However, to help ensure compliance with the Migratory Bird Treaty Act (MBTA), the operator should schedule construction or drilling activities to begin outside the raptor nesting season (February 1 to August 15) if practicable. If initiation of construction, drilling, or completion activities during these dates cannot be avoided, the operator is responsible for complying with the MBTA, which prohibits the “take” of birds or of active nests (those containing eggs or young), including nest failure caused by human activity (see COA for Migratory Birds).
12. Migratory Birds – Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all vegetation removal or surface disturbance in previously undisturbed lands providing potential nesting habitat for Birds of Conservation Concern (BCC) is prohibited from **May 1 to July 1**. An exception to this TL may be granted if nesting surveys conducted no more than one week prior to surface-disturbing activities indicate that no BCC species are nesting within 30 meters (100 feet) of the area to be disturbed. Nesting shall be deemed to be occurring if a territorial (singing) male is

present within the distance specified above. Nesting surveys shall include an auidial survey for diagnostic vocalizations in conjunction with a visual survey for adults and nests. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 AM under favorable conditions for detecting and identifying a BCC species. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 1 and continue into the 60-day period at the same location.

13. Range Management. Range improvements (fences, gates, reservoirs, pipelines, etc.) shall be avoided during development of natural gas resources to the maximum extent possible. If range improvements are damaged during exploration and development, the operator will be responsible for repairing or replacing the damaged range improvements. If a new or improved access road bisects an existing livestock fence, steel frame gate(s) or a cattleguard with associated bypass gate shall be installed across the roadway to control grazing livestock.
14. Fossil Resources. All persons associated with operations under this authorization shall be informed that any objects or sites of paleontological or scientific value, such as vertebrate or scientifically important invertebrate fossils, shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with operations under this authorization any of the above resources are encountered the operator shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM of the findings. The discovery must be protected until notified to proceed by the BLM.

Where feasible, the operator shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM of any finds. The BLM will, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the operator shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

15. Cultural Education/Discovery. All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the BLM shall be notified by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), activities shall stop in the vicinity of the discovery, and the discovery shall be protected for 30 days or until notified by the BLM to proceed.

If in connection with operations under this contract, the operator, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the BLM of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the BLM. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM from a Federal agency insofar as practicable. When not practicable, the operator shall bear the cost of the services of a non-Federal professional.

Within five working days, the BLM will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)
- the timeframe for the BLM to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the BLM are correct and that mitigation is appropriate

The operator may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the operator shall be responsible for mitigation costs. The BLM will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator will be allowed to resume construction.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361).

16. Visual Resources. Production facilities shall be placed to avoid or minimize visibility from travel corridors, residential areas, and other sensitive observation points—unless directed otherwise by the BLM due to other resource concerns—and shall be placed to maximize reshaping of cut-and-fill slopes and interim reclamation of the pad.

To the extent practicable, existing vegetation shall be preserved when clearing and grading for pipelines. The BLM may direct that cleared trees and rocks be salvaged and redistributed over reshaped cut-and-fill slopes or along linear features.

Above-ground facilities including valve risers and welded pipe protection cages shall be painted **Shadow Gray** to minimize contrast with adjacent vegetation or rock outcrops.

17. Soils. Cuts and fills shall be minimized when working on erosive soils and slopes in excess of 30 percent. Cut-and-fill slopes shall be stabilized through revegetation practices with an approved seed mix shortly following construction activities to minimize the potential for slope failures and excessive erosion. Fill slopes adjacent to drainages shall be protected with well-anchored silt fences, straw wattles, or other acceptable BMPs designed to minimize the potential for sediment transport. On slopes greater than 50 percent, BLM personnel may request a professional geotechnical analysis prior to construction.
18. Special Status Plant Protections. Due to the presence of mapped marginally suitable habitat for DeBeque phacelia located approximately 30 meters from the edge of project disturbance, the following measures shall be implemented. Future botany surveys may be conducted at the

appropriate time of year and under suitable climate conditions to determine presence or absence of DeBeque phacelia. If these surveys are conducted to the CRVFO standards and determine that these species are not present within delineated suitable and marginally suitable habitats, then the following mitigation requirements shall be lifted.

The Operator shall incorporate the following steps to avoid and minimize impacts to DeBeque phacelia:

- a. All vehicle and foot traffic shall be restricted to the existing road and the delineated project disturbance area to avoid disturbance of the mapped marginally suitable habitat.
- b. No new surface disturbing activities shall occur within less than 30 meters of the edge of delineated marginally suitable habitat.
- c. Surface disturbing activities shall have dust control measures implemented. No adjuvants shall be added to water applied to the ground surface to control dust within the project area.
- d. Weed control shall be limited to spot spray or wicking treatments only within the project area, since the project area is all within 100 meters of delineated marginally suitable habitat. A signed Pesticide Use Proposal (PUP) identifying protections for sensitive areas shall be obtained from the BLM prior to any chemical treatments of weeds within the project area. No broadcast spray shall occur within the project area.