

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

NUMBER: DOI-BLM-CO-N040-2010-0079-CX (390)

CASEFILE/PROJECT NUMBER (optional):

PROJECT NAME: Proposal to Install One Buried Natural Gas Pipeline and One Buried Water Line within the Existing 20-inch Hunter Mesa to Pumba Pipeline Corridor East of Grass Mesa.

LEGAL DESCRIPTION: Township 6 South (T6S), Range 93 West (R93W), Section 34, SE $\frac{1}{4}$ SE $\frac{1}{4}$ and Section 35, S $\frac{1}{2}$ SW $\frac{1}{4}$; T7S R93W, Section 3, Lot 1, SE $\frac{1}{4}$, and Section 10, W $\frac{1}{2}$ NE $\frac{1}{4}$, Sixth Principal Meridian.

APPLICANT: EnCana Oil & Gas (USA) Inc.

DESCRIPTION OF PROPOSED ACTION: EnCana Oil & Gas (USA) Inc. (“EnCana”) proposes to upgrade their ability to transport natural gas between their Hunter Mesa Compressor and Pumba Compressor by installing one maximum 20-inch diameter steel natural gas pipeline within the existing Hunter Mesa to Pumba Pipeline Corridor which currently contains an operating 20-inch-diameter gas pipeline among other assorted gas and water lines (Figure 1) A maximum 12-inch-diameter water line would also be installed in a portion of the 20-inch gas line corridor to serve as a water delivery connection between Pumba Compressor and the ongoing 10-inch water line installation (Figure 1). EnCana has applied for a BLM right-of-way (ROW) to authorize the gas and water pipeline installation, which would occur after May 1, 2011.

The new 20-inch steel gas pipeline would drastically improve EnCana’s ability to transport gas from their Mamm Creek Field through the Hunter Mesa and Pumba Compressor facilities. EnCana plans to upgrade their gas gathering system east of the Hunter Mesa Compressor to a high-pressure system that allows them to also efficiently gather natural gas from other gas producers (Williams, Bill Barrett Corporation) in the Mamm Creek Field. Based on future gas production estimates from these three producers in the Mamm Creek Field, this new pipeline would be expected to transport gas volumes beyond the next ten years.

The new maximum 12-inch steel water pipeline would allow pipeline delivery of any collected water from the compression operations at Pumba Compressor to the Hunter Mesa Water Treatment Facility and forego the use of water-hauling trucks from the Pumba site.

Description of Maximum 20-inch Buried Gas Pipeline

The proposed alignment for the 20-inch gas pipeline would run between the two compressor stations totaling 21,172 feet with 8,460 feet occurring on public land (Figure 1). On BLM, installation of the buried 20-inch gas pipeline would be conducted within the existing reclaimed 20-inch Hunter Mesa to

Pumba Pipeline Corridor; no new surface disturbance would occur outside the previously disturbed, reclaimed pipeline corridor. However, a new alignment section would occur on private lands (Benzel) to circumvent the proposed alignment around the Cedar Springs Subdivision.

The existing Hunter Mesa to Pumba 20-inch gas pipeline (COC67129) was originally installed in 2003 by EnCana. The 3-inch Mamm Creek to Pumba produced water pipeline (COC67521) was also buried in the same trench with the 20-inch gas line. An 8-inch gas gathering line (authorized via Sundry Notice as lease operations) serving the nearby well pads (C35 and L35 pads) was also buried alongside and within 5 feet of the 20-inch gas line in generally the same timeframe.

Description of Maximum 12-inch Buried Water Pipeline

The proposed 12-inch water line alignment would run north from Pumba Compressor to the connection point of the ongoing 10-inch water line installation in SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 34 (Figure 1). Approximately 5302 feet of water line would be installed in the same trench at the same time as the new 20-inch gas pipeline within the previously disturbed Hunter Mesa to Pumba pipeline corridor. The water line segment would be installed entirely on BLM.

An EnCana Grass Mesa 4-inch water line (COC40235), presently being decommissioned and replaced with a new 10-inch steel water pipeline, also is buried within a portion of the subject pipeline corridor (analyzed in Statutory Categorical Exclusion - DOI-BLM-CO-N040-2010-0069) as shown on Figure 1. A 640-foot segment of the proposed 20-inch gas pipeline would be buried alongside the ongoing 10-inch water line during the water line installation scheduled during fall 2010 because there is very limited space in the existing pipeline corridor to accommodate the 20-inch line installation after the water line is installed (Figure 2). The pipeline corridor parallels the Pumba Access Road, which has steep road cuts and fills and an overhead power pole that is buried in proximity to the planned water pipeline alignment, creating an extremely limited space to install the 20-inch water line in spring 2011 parallel to the ongoing installation of the 10-inch water line. Conducting an early installation of the 20-inch gas line in the same trench for this 640 feet segment avoids the need for new surface disturbance outside the existing pipeline corridor and disrupting traffic flow to Pumba Compressor and the myriad of producing gas wells in the Grass Mesa area.

Surface Disturbance

As authorized in BLM ROW COC67129 and Temporary Use Permit COC6712901, the existing Hunter Mesa to Pumba Pipeline Corridor has a previously disturbed 75-foot width, which is presently in a satisfactory reclaimed state. For the sake of this analysis, there is no attributable new surface disturbance on public land as the installation of the three proposed pipelines would be conducted entirely within this previously disturbed 75 foot corridor. Topsoil would be initially stripped and segregated alongside the edge of the corridor with later spreading across the reshaped corridor after the lines are welded, buried, tested and backfilled.

Although the pipeline installation would occur within the previously disturbed corridor, the work would redisturb approximately 14.6 acres on BLM. The entire project would disturb 36.4 acres.

Resource surveys including sensitive plant and cultural resources have been completed on BLM. A new cultural resource survey was conducted in summer 2010 along the new pipeline alignment on Benzel property in Sections 2 and 35 with no findings of note. The construction period for this project would be 60 days.

An onsite for the project was conducted on June 23, 2010. Although the proposed pipeline upgrade would fall within BLM's Visual Resource Management (VRM) Class III area, it was determined during the onsite visit that the segment on BLM is not visible from County Road 319 or Colorado River valley floor.

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

Name of Plan: The current land use plan is the *Glenwood Springs Resource Management Plan* (RMP), approved in 1984 and revised in 1988 (BLM 1984). 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 1999b).

Date Approved: *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) – approved 11/27/91 and *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999b) – approved March 24, 1999.

Decision Number/Page: BLM 1991, page 3; BLM1999b, page 15

Decision Language: The 1991 Oil and Gas Plan Amendment (BLM 1991) included the following at page 3: “697,720 acres of BLM-administered mineral estate within the Glenwood Springs Resource Area are open to oil and gas leasing and development, subject to lease terms and (as applicable) lease stipulations” (BLM 1991, page 3). This decision was carried forward unchanged in the 1999 ROD and RMP amendment at page 15 (BLM 1999b): “In areas being actively developed, the operator must submit a Geographic Area Proposal (GAP) [currently referred to as a Master Development Plan, MDP] that describes a minimum of 2 to 3 years of activity for operator controlled leases within a reasonable geographic area.” Furthermore, Appendices A and B (BLM 1999b) list Lease Stipulations (Appendix A) and Management of Lease Development (Appendix B) features which further support the initial decision language from 1991 Resource Management Plan Amendment.

REVIEW OF EXISTING NEPA DOCUMENTS:

The following NEPA document(s) satisfies the criteria of being an activity-level or project-level EIS or EA that is applicable to the Proposed Action, as described below.

The Grass Mesa Geographic Area Plan (GAP) analyzed 16 pads and 93 wells for oil and gas development (EA #CO140-2004-081 approved on November 4, 2004). Although the GAP analyzed various new well pads, wells and associated roads and pipelines, the existing natural gas and water collection pipeline system was specifically identified and was inherently included in the impact analysis in the GAP.

Furthermore, EA #CO140-2003-0090 (approved 9/15/03) identified and analyzed the 2003 Hunter Mesa Compressor to Mamm Creek Compressor to Pumba Compressor gas pipeline installation and right-of-way (COC67129) and temporary use permit (COC67129-01).

CATEGORICAL EXCLUSION REVIEW:

The proposed action is categorically excluded from further documentation in accordance with statutory NEPA categorical exclusions (CXs), as granted in Section 390 of the Energy Policy Act of 2005, for oil and gas exploration and development. The proposed action qualifies as a categorical exclusion under Section 390, based on the qualifying criterion Number 1, of the categories listed below (select only one).

Qualifying Criteria	YES	NO
1. Individual surface disturbances of less than five (5) acres, so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.	X	
a. Will disturb less than 5 acres; if more than one action is proposed for a lease, each activity is counted separately, and each may disturb up to 5 acres.	X	
b. The current unreclaimed surface disturbance readily visible on the entire leasehold is not greater than 150 acres, including the proposed action. See Figure 3	X	
c. This categorical exclusion includes the requirement of a site-specific NEPA document. A site-specific NEPA analysis may be an EA/EIS for exploration and/or development, for a specific MDP, for a multi-well or a single well permit approval.	X	

None of the following extraordinary circumstances in 516 DM 2, Appendix 2, applies.

Extraordinary Circumstances	YES	NO
1. Have significant adverse effects on public health and safety.		X
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		X
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].		X
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.		X
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.		X
6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		X
7. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.		X
8. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X
9. Violate a Federal law or a State, local, or tribal law or requirement imposed for the protection of the environment.		X
10. Have the potential for a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).		X

Extraordinary Circumstances	YES	NO
11. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).		X
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		X

INTERDISCIPLINARY REVIEW:

The proposed action was presented to, and reviewed by the Colorado River Valley Field Office interdisciplinary team on June 23, 2010. A list of resource specialists who participated in this review is available upon request from the Colorado River Valley Field Office.

MITIGATION: Terms and Conditions that would be included in the BLM Right-of-Way (ROW) are attached.

NAME OF PREPARER: Jim Byers, Natural Resource Specialist

NAME OF ENVIRONMENTAL COORDINATOR: Allen Crockett, Supervisory NRS

DECISION AND RATIONAL:

I have reviewed this CX and have decided to approve the proposed action.

This action is listed in the Instruction Memorandum Number 2005-247 and Instruction Memorandum Number 2010-118 as an action that may be categorically excluded under Section 390 of the Energy Policy Act of 2005. I have evaluated the action relative to the five qualifying criteria listed above and have determined that, as it does not represent an exception, it is therefore categorically excluded from further environmental analysis.

SIGNATURE OF AUTHORIZED OFFICIAL: 
Supervisory Natural Resource Specialist

DATE SIGNED: Sept 10, 2010

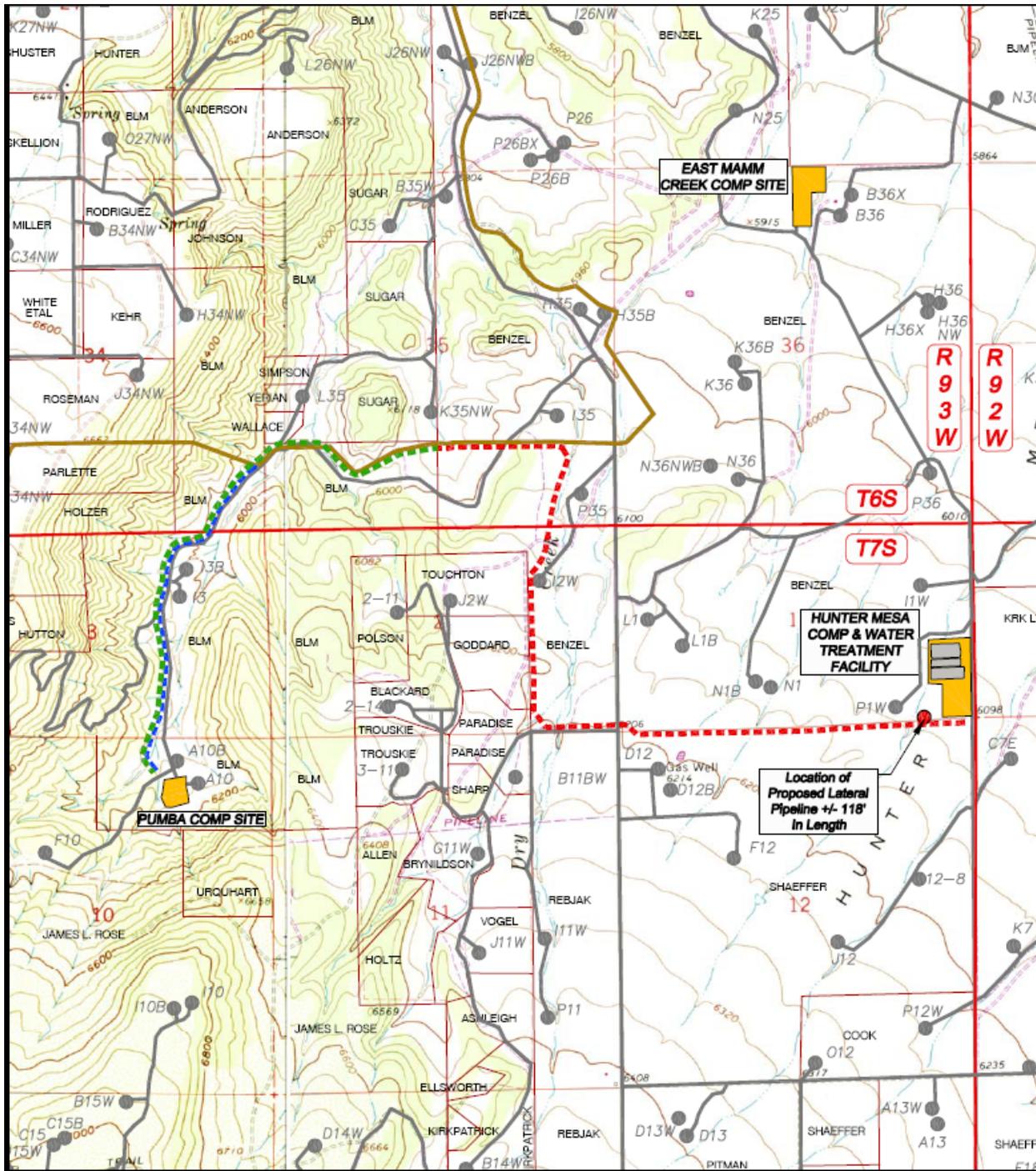
Administrative Review or Appeal Opportunities

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

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

Contact Person

For additional information concerning this decision, contact Jim Byers, Natural Resource Specialist, Colorado River Valley Field Office, address, Phone: 970-876-9056.



LEGEND

- PROPOSED GAS PIPELINE ACROSS FEE LANDS (12,712 FEET)
- PROPOSED GAS PIPELINE ACROSS BLM LANDS (8,460 FEET)
- PROPOSED 12" OR LESS WATERLINE ACROSS BLM LANDS (5,302 FEET)
- M34NW TO BENZEL 10" WATERLINE REPLACEMENT

EnCana Oil & Gas (USA) Inc.

HUNTER MESA TO PUMBA PIPELINES
 SECTIONS 1, 2, 3, 10 & 12, T7S, R93W
 & SECTIONS 34 & 35, T6S, R93W, 6th, P.M.
 GARFIELD COUNTY, COLORADO



Wasatch Surveying Associates
 906 Main Street Evanston, Wyoming 82930
 Phone No. (307) 789-4545 Fax 307-789-5722



VICINITY MAP

PROJECT NUMBER
10-04-51
 DATE: 9/8/10
 SCALE: 1" = 2000'

1
of 1

Figure 1. Project Location Map

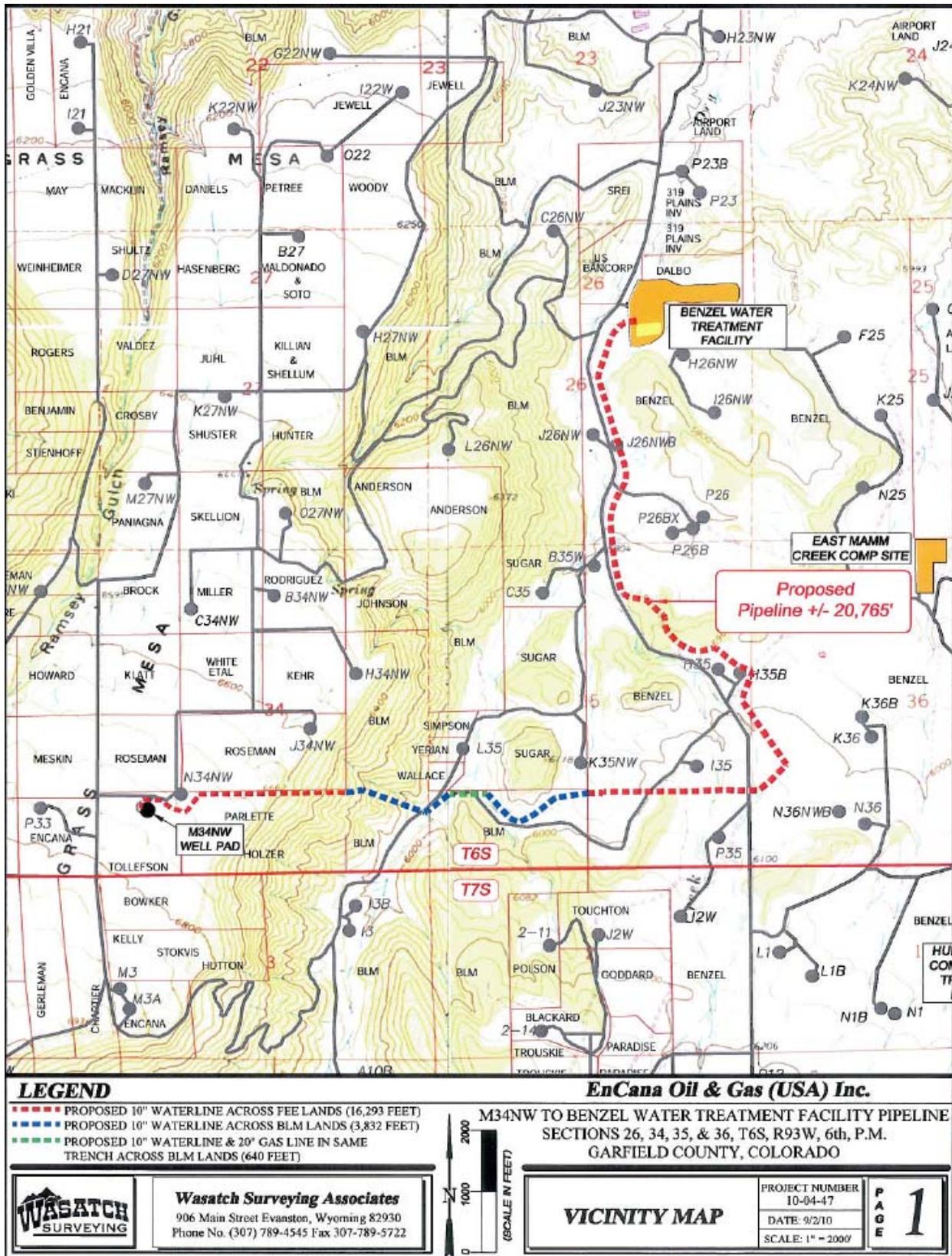


Figure 2. Location of Early Installation of 20-inch Gas Line with a 10-inch Water Line

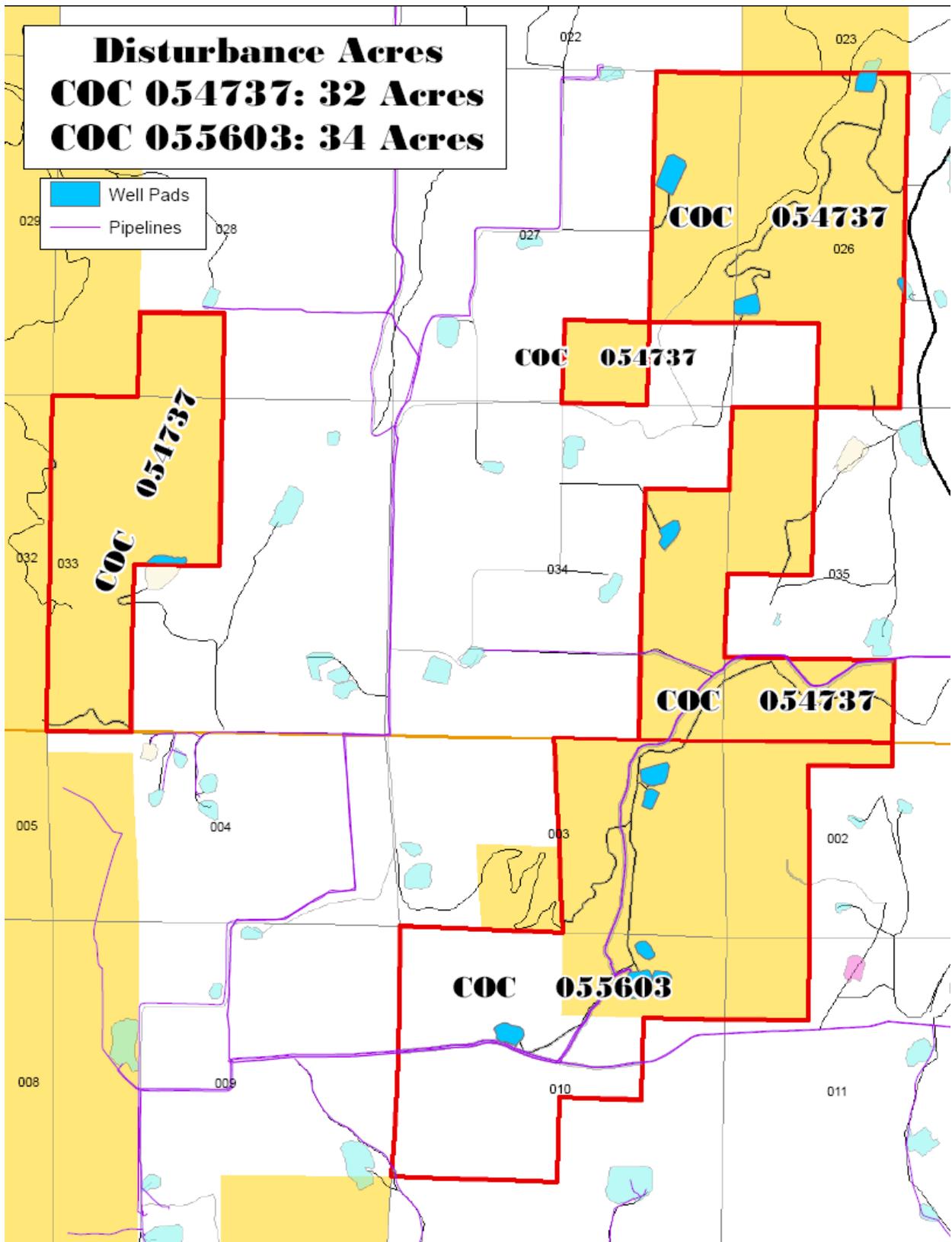


Figure 3. COC54737 and COC55603 Lease Surface Disturbances

**Special Stipulations for BLM RIGHT-OF-WAY
DOI-BLM-CO-N040-2010-0079-CX (390)**

1. Administrative Notification. The operator shall notify the BLM representative at least 48 hours prior to initiation of construction. If requested by the BLM representative, the operator shall schedule a pre-construction meeting, including key operator and contractor personnel, to ensure that any unresolved issues are fully addressed prior to initiation of surface-disturbing activities or placement of production facilities.
2. Application of GAP COAs. Standard Conditions of Approval outlined in Appendix C of the Grass Mesa Geographic Area Plan will apply and remain in full force and effect.
3. Facility Paint Color. The paint color to be used on all surface facilities including pipeline risers and metal containment rings surrounding the launchers or receivers shall be Shadow Gray.
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. 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 and temporary (pre-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 for the pad. Reclamation, including seeding, of temporarily disturbed areas along roads, pipelines, and topsoil piles and berms, shall be completed within 30 days following completion of construction.

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.

Seedbed preparation is not required for topsoil storage piles or other areas of temporary seeding.

Requests for use of soil amendments, including basic product information, shall be submitted to the BLM 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 May 1, 2008). Note that temporary seeding no longer allows the use of sterile hybrid non-native species.

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 noxious, prohibited, or restricted 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 measures approved by the BLM. Cut-and-fill slopes along drainages or in areas with high erosion potential shall also be protected from erosion using hydromulch designed specifically for erosion control or biodegradable blankets/matting, bales, or wattles of weed-free straw or weed-free native grass hay. A well-anchored fabric silt fence shall also be placed at the toe of cut-and-fill slopes along drainages or to protect other sensitive areas from deposition of soils eroded off the slopes. Additional BMPs shall be employed as necessary to reduce soil erosion and offsite transport of sediments.
 - 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 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.
6. 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 shall be submitted to BLM by **December 1**.
7. Migratory Birds. It shall be the responsibility of the operator to comply with the Migratory Bird Treaty Act (MBTA) with respect to “take” of migratory bird species. Under the MBTA, “take” means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The operator shall prevent use by migratory birds of any pit containing fluids associated with oil or gas operations, including but not limited to reserve pits, produced water pits, frac-water pits, cuttings trenches (if covered by water/fluid), and evaporation pits. Fluids in these pits may pose a risk to migratory birds (e.g., waterfowl, shorebirds, wading birds, songbirds, and raptors) as a result of ingestion, absorption through the skin, or interference with buoyancy and temperature regulation. Regardless of the method used, it shall be in place within 24 hours following the placement of fluids into a pit. Because of high toxicity to birds, oil slicks and oil sheens should immediately be skimmed

off the surface of any pit that is not netted. The most effective way to eliminate risk to migratory birds is prompt drainage, closure, and reclamation of pits, which is strongly encouraged. All mortality or injury to species protected by the MBTA shall be reported immediately to the BLM project lead and to the USFWS representative in the BLM Field Office at 970-876-9051 (Creed Clayton) and visit <http://www.fws.gov/mountain-prairie/contaminants/oilpits.htm>.

8. Paleontological 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 authorized officer of the findings. The discovery must be protected until notified to proceed by the BLM authorized officer.

Where feasible, the operator shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM authorized officer of any finds. The BLM authorized officer 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.

9. 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 authorized officer 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 authorized officer 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 authorized officer 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 authorized officer. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM authorized officer 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 authorized officer 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 authorized officer 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 authorized officer 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 authorized officer will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM authorized officer 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).

10. Raptor Nesting. To ensure compliance with the Migratory Bird Treaty Act (MBTA) with respect to nesting raptors, 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 this period cannot be avoided, the operator is responsible for complying with the MBTA, which prohibits the “take” of birds or active nests (those containing eggs or young), including nest failure caused by noise and human activity.
11. Road Maintenance. Roads shall be crowned, ditched, surfaced, drained with culverts and/or water dips, and constructed to BLM Gold Book standards. Initial gravel application shall be a minimum of 6 inches. The operator shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement, and dust abatement. When rutting within the traveled way becomes greater than 6 inches, blading and/or gravelling shall be conducted as approved by the authorized officer.
12. Big Game Winter Range Timing Limitation. To minimize impacts to wintering big game, no construction, drilling or completion activities shall occur during a Timing Limitation (TL) period from **December 1 to April 30** per lease stipulation and Grass Mesa GAP EA. To further reduce impacts to wintering big game, remote sensing should be used for production monitoring, and unavoidable monitoring or maintenance activities should be conducted between 9 a.m. and 3 p.m., to the extent practicable. These additional recommendations apply to the period from December 1 to April 30.
13. Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all surface-disturbing activities are prohibited from **May 1 to July 1** to reduce impacts to Birds of Conservation Concern (BCC). An exception to this COA will 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 aural 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.

14. Windrowing of Topsoil. Topsoil shall also be windrowed, segregated and stored along pipelines and roads for later spreading across the disturbed corridor during final reclamation. Topsoil berms shall be promptly seeded to maintain soil microbe health, reduce erosion, and prevent weed establishment.
15. Hydrostatic Pipeline Testing. After testing of newly installed pipelines, water used in pressure testing of the lines shall be disposed at a State-approved facility or reused for drilling and/or completion operations.
16. Visual Resources. After the pipelines are buried and backfilled, after the corridor is reshaped to the natural contours and drainages, and after the site has been broadcast seeded, any stockpiled boulders shall be set onto the corridor randomly, but in a manner that appears natural. BLM may direct that boulders and any cleared tree debris be placed in particular manner or location to augment the overall visual appearance of the site reclamation.
17. 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.

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.

18. 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 in the BLM Field Office (970-876-9051).
19. 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 waters of the U.S. may require mitigation. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17 (Travis Morse). Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.