

**U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Energy Office
2425 South Grand Avenue, Suite 101
Glenwood Springs, CO 81601**

Statutory Categorical Exclusion, CO140-2008-134

Project: Williams Production RMT Company (Williams) is requesting approval (via Sundry Notices dated August 15 and 18, 2008) to install water, condensate, and natural gas lines from two separate pads to two central collection facilities.

Location: The proposed pipelines are variously located in sections 18 and 19, Township 6 South, Range 94 West, Sixth Principal Meridian, Garfield County, Colorado. The pipelines and associated wells and well pads include the following:

1. Replace water and condensate lines:
Well pad name: RWF 11-19 (wells RWF 11-19, RWF 514-18, RWF 324-18, RWF 21-19, RWF 521-19, RWF 14-18, RWF 313-18, RWF 424-18, RWF 21-19, RWF 511-19, RWF 314-18, RWF 413-18, RWF 24-18, RWF 421-19, RWF 311-19, RWF 414-18, RWF 524-18, RWF 621-18, RWF 321-19, RWF 411-19).
Water and condensate for the above wells is piped and collected at the DOW 1-W-19 pad using one 2-inch water line and one 2-inch condensate line which runs from the RWF 11-19 well pad to the DOE 1-W-19 well pad. The lines are in poor condition and Williams proposes to replace them with one 4-inch water line and one 2-inch condensate line. The lines would be buried, requiring up to an additional 15 feet of disturbance adjacent to the access road. The total length of the replacement lines would be 2,500 feet, with 2,400 feet on BLM-managed Federal land.
2. Install temporary surface water lines.
Well pad name: RWF 21-18 (wells RWF 521-18, RWF 433-7, RWF 421-18, RWF 534-7, RWF 411-7, RWF 434-7, RWF 333-7, RWF 34-7, RWF 334-7).
Williams requests approval to lay temporary surface water lines (for fracturing) from the RMV 143-18 well pad across BLM-managed Federal land to the RWF 21-18 well pad. The water lines would follow existing disturbance and would be 3,750 feet long with 1,750 feet on BLM-managed Federal land.
3. Install water line to gather produced water.
Well pad name: RWF 21-18 (wells RWF 521-18, RWF 433-7, RWF 421-18, RWF 534-7, RWF 411-7, RWF 434-7, RWF 333-7, RWF 34-7, RWF 334-7).
Williams requests approval to install a water line to gather produced water from the wells located at the RWF 21-18 well pad and convey it to the Rulison Evaporation pond. The total length of the proposed line is 6,560 feet with 2,300 feet on BLM-managed Federal land.
4. Install water lines to gather produced water.
Well pad name: DOE 1-W-19 (wells DOE 1-W-9, DOE 1-M-19).
Williams requests approval to install a water line to gather produced water from the wells located at the DOE 1-W-19 well pad and pipe it to the water line proposed in #3 above and eventually to the Rulison evaporation pond.

5. Install natural gas pipeline.
Williams proposes to install a 12-inch steel gas line to gather produced gas from wells in the Rulison area. The line would run from the 333-18 pad to the NW¼ of section 20 (see Figure 1.) The gas line would not require additional disturbance because it would be installed in conjunction with the water line described in #3 above.

Lease Stipulations and Conditions of Approval: Lease stipulations attached to Federal Lease COC62160 apply. See Table 1 for details.

Table 1. Lease Stipulations and Lease Notices, Federal Lease COC62160 (1999)

CSU: Controlled Surface Use, NSO: No Surface Occupancy, TL: Timing Limitation, LN: Lease Notice

Description of Lands	Stipulations
T. 6 S., R. 94 W., S. 7: SE; S. 8: S2 S. 18: Lot 1 S. 18: NENW, N2NE, SENE, NESW	<p>CSU: Surface occupancy or use is subject to the following special operating constraints: Riparian and wetland zones within 500 feet of the outer edge of the riparian or wetland vegetation, activities associated with oil and gas exploration and development, including roads, pipelines and wellpads, may require special design, construction and implementation measures, including relocation of operations beyond 200 meters, in order to protect the values and functions of the riparian and wetland areas. <i>The areas immediately adjacent to the riparian vegetation are most important to the function of the riparian zone and will be avoided.</i></p>
T. 6 S., R. 94 W., S. 7: SESE; S. 8: N2SE; S. 18: Lot 1; S. 18: E2NE, NESE	<p>CSU: For the purpose of protecting BLM Sensitive Species: For those species listed as sensitive by BLM and for significant natural plant communities, special design, construction, and implementation measures, including relocation of operations by more than 200 meters, may be required. For plants, habitat areas include occupied habitat and habitat necessary for the maintenance or recovery of the species or communities. For animals, habitat areas are areas that are important during some portion of the lifecycle, such as nesting and production areas or communal roost areas.</p>
T. 6 S., R. 94 W., S. 7: SE, S. 8: S2, S. 18: Lots 1-4; S. 18: NE,E2NW, E2SW, NESE	<p>CSU: Erosive Soil and Slopes > 30%: Special design, construction, operation, and reclamation measures will be required to limit the amount of surface disturbance, reduce erosion potential, maintain site stability and productivity, and insure successful reclamation in identified areas of highly erosive soils of slopes greater than 30%. Highly erosive soils in the “severe” and “very severe” classes are depicted in NRCS mapping. Areas identified in the RMP are included (Erosion hazard areas and water quality management areas).</p> <p>The SUPO of the APD for wells on erosive soils or slopes >30% MUST include specific measures to comply with the GSRA reclamation policy, such as stabilizing the site to prevent settling, slumping, and highwall [cutslope] degradation, and controlling erosion to protect the site and adjacent areas from accelerated erosion and the sedimentation and siltation of nearby surface waters.</p> <p>Specific performance objectives for the plan include:</p>

	<ul style="list-style-type: none"> • Limitation of disturbance to 3.0 acres per pad; • Limitation of interim “in use” area to 0.5 acres per pad; and • Maximizing area of interim reclamation that is shaped to a grade of 3:1 (h:v) or less; any planned highwall [cut slope] must be demonstrated to be safe and stable and include enhanced reclamation and erosion prevention measures as needed. <p>Operator must submit evaluation of site’s reclamation potential based on problematic characteristics of the site (slope, aspect, vegetation, depth of soils, soil salinity, and alkali content).</p>
T. 6 S., R. 94 W., S. 7: SE; S. 8: S2; S. 18: Lot 1; S. 18: NE,E2NW, NESE	CSU: Controlled Surface Use (CSU): VRM Class II Areas: Protection may include special design requirements, relocation of operations by more than 200 meters, and other measures to retain overall landscape character. Such measures would be designed to blend the disturbance in with the natural landscape so that it does not attract attention from KOPs.
T. 6 S., R. 94 W., S. 8: NENE, SESE	CSU: <i>For the purpose of protecting the Sharrard Park Paleontological Area:</i> Special survey, design, construction, and reclamation measure may be required, including relocation of operations beyond 200 meters, in the identified portions of Wasatch outcrops within the Sharrard Park area.
T. 6 S., R. 94 W., S. 8: NESE, S2SE; S. 18., E2SW, NESE	TL: No surface use (does not apply to operation and maintenance of production facilities) from December 1 to April 30 for the purpose of protecting Big Game Winter Habitat (Mule Deer, Elk, Pronghorn Antelope and Bighorn sheep) which includes severe big game winter range and other high value winter habitat as mapped by CDOW.
T. 6 S., R. 94 W., S. 18: NE, NESE	TL: No surface use from February 1 to August 15 for the purpose of protecting: Raptor nesting and fledgling habitat for a ¼-mile buffer zone around nest site.
T. 6 S., R. 94 W., S. 18: Lot 1; S. 18: E2NE, E2NW, NESW	NSO: For the purpose of protecting riparian and wetland zones. See Lease for exception criteria.
T. 6 S., R. 94 W., S. 18: NENE	NSO: For the purpose of protecting: Raptors. To protect raptors (includes Golden Eagles and Osprey; all Accipiters, Falcons, except Kestrels, butes and owls) within 1/8-mile radius of a nest site.
T. 6 S., R. 94 W., S. 7: SE; S. 8: S2; S. 18: NE, NENW, NESE; S. 18: Lots 1-4	NSO: To maintain site stability and site productivity, on slopes greater than 50% (does not apply to pipelines). Exception criteria: If lessee demonstrates that operations can be conducted without causing unacceptable impacts and that less restrictive measures will protect the public interest, an exception may be approved by the authorized officer. A request must include an engineering plan and reclamation plan which together provide a high level of certainty that such operations can be conducted consistent with the objectives of the GSRA reclamation policy. The plans must demonstrate previous success with reclamation in similar sites.

T. 6 S., R. 94 W., S. 7: SE; S. 8: SW, W2SE, SESE S. 18: NE, NESE	NSO: I-70 Viewshed. Exception would be granted if protective measures can be designed to accomplish VRM Class II objectives.
ALL LANDS within lease	LN: The lessee is hereby notified that an inventory shall be conducted by an accredited paleontologist approved by the Authorized Officer prior to surface-disturbing activities in Class I and II Paleontological areas.
ALL LANDS within lease	LN: The lessee is hereby notified that, in areas of known or suspected habitat of special status species, or habitat of other species of interest, such as Raptor nests or Elk calving areas, or significant natural plant communities, a biological inventory will be required prior to approval of operations. The inventory would be used to prepare mitigating measures to reduce the impacts of surface disturbance on the affected species or their habitats. These mitigating measures may include, but are not limited to, relocation of roads, wellpads, pipelines, and other facilities, and fencing operations or habitat.
ALL LANDS within lease	LN: The lessee is hereby notified that, within high value or crucial Big Game Winter Range, the operator is required to implement specific measures to reduce impacts of oil and gas operations on wildlife and wildlife habitat. Such measures shall be developed in concert with BLM during the preparation of the EA. They may include completion of habitat improvement projects designed to replace habitat lost through construction activities; reduction of human disturbance in important habitat areas during critical times of the year by installing gates and closing roads; using telemetry to collect well data; and accessing well site locations during times of the day when wildlife is not likely to be present in the area. <i>See Lease COC62160 for further details.</i>
ALL LANDS within lease	LN: The lessee is hereby notified that the operator is required to establish a set of reasonable operating procedures for employees and contractors working in important wildlife habitats. Such procedures would be designed to inform employees and contractors of ways to minimize the effect of their presence on wildlife and wildlife habitats.
ALL LANDS within lease	LN: The lessee is hereby notified that all lessees in the GSRA are required to report to the Authorized Officer annually on the ongoing progress of reclamation at locations developed on the lease.
ALL LANDS within lease	LN: Special design and construction may be required in order to minimize visual impacts of drilling activities within 5 miles of all communities or populations centers throughout the GSRA, major BLM or county roads and state or Federal highways.

Conditions of Approval included in the Wheeler to Webster Geographic Area Plan (WWGAP) would remain in full force and effect. COAs are also attached to this Statutory Categorical Exclusion and supersede relevant COAs from the WWGAP.

NEPA Compliance: The following category of Statutory Categorical Exclusions (SCEs) pursuant to Section 390 of the Energy Policy Act of 2005 applies to this proposal:

Category 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.* Total surface disturbance for the additional pipelines would be less than 1 acre. Total surface disturbance on Federal Lease COC62160 is approximately 23 acres.

Approval: It is my decision to approve the proposed action with the terms and conditions described above:

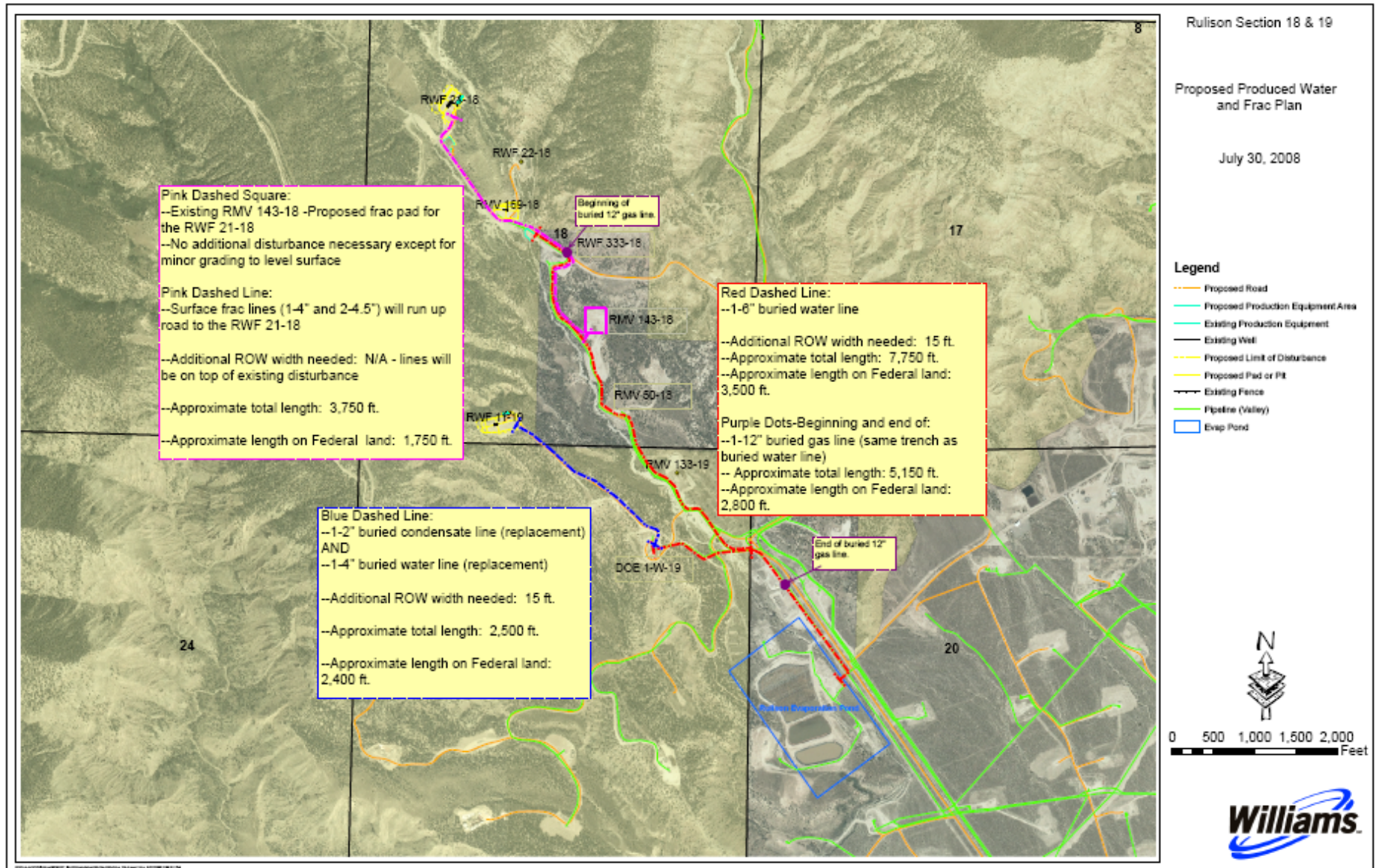


Allen B. Crockett, Ph.D., J.D.
Supervisory Natural Resource Specialist

10-9-08

Date

Figure 1. Project Location Map



STANDARD SURFACE USE CONDITIONS OF APPROVAL

The following standard surface use COAs are in addition to all stipulations attached to the respective Federal leases and to any site-specific COAs for individual well pads. Wording and numbering of these COAs may differ from those included in the Wheeler to Webster Geographic Area Plan. In cases of discrepancies, the following COAs supersede earlier versions.

1. Administrative Notification. The operator shall notify the BLM representative at least 48 hours prior to initiation of construction.
2. Road Construction and 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 4 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.
3. Dust Abatement. The operator shall implement dust abatement measures as needed to prevent fugitive dust generated by vehicular traffic, equipment operations, or wind events. The authorized officer 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.
4. 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 in flowing streams shall utilize either a piped stream diversion or a coffer dam 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 18 inches. Contact Noel Ludwig, Glenwood Springs Energy Office Hydrologist, at 970-947-5215 or Noel_Ludwig@blm.gov. 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 recommends designing drainage crossings for the 100-year event. Contact Sue Nall at 970-243-1199 x16 or susan.nall@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.

5. Jurisdictional Waters of the U.S. The operator shall obtain appropriate permits from the U.S. Army Corps of Engineers 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 Sue Nall, Regulatory Specialist, Colorado/Gunnison Basin Regulatory Office, U.S. Army Corps of Engineers, at 970-243-1199 x16 or susan.nall@usace.army.mil.

6. Wetlands and Riparian Zones. The operator shall restore temporarily disturbed wetlands or riparian areas. The operator shall consult with the BLM Glenwood Springs Energy Office to determine appropriate mitigation, including verification of native plant species to be used in restoration. Contact Noel Ludwig, Glenwood Springs Energy Office Hydrologist, at 970-947-5215 or noel_ludwig@blm.gov.
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 and temporary (pre-interim) reclamation are described below.

- a. Deadline for Temporary Seeding and Interim Reclamation. Topsoil storage piles, stormwater control features, and cut-and-fill slopes shall undergo temporary seeding to stabilize the material and minimize weed infestations within 30 days following completion of pad construction. Interim reclamation to reduce a well pad to the maximum size needed for production shall be completed within 6 months following completion of the last well planned for the pad.

Both of these deadlines are subject to being extended upon approval of the authorized officer based on season, timing limitations, or other constraints on a case-by-case basis.

- b. Topsoil Stripping, Storage, and Replacement. Topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. This shall include, at a minimum, the upper 6 inches of soil. Any additional topsoil present at a site, such as indicated by color or texture, shall also be stripped. The authorized officer may specify a stripping depth during the onsite visit. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation.
- c. 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.

- d. 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 allows use of a seed mix containing sterile hybrid non-native species in addition to native perennial 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 supplied to the BLM Glenwood Springs Energy Office Ecologist (Beth Brenneman, 970-947-5232 or beth_brenneman@blm.gov) 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.

- e. 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. Hydroseeding and hydromulching may be used in temporary seeding or in areas where drill-seeding or broadcast-seeding/raking are impracticable. Hydroseeding and hydromulching must 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. Requirements for reseeding of unsuccessful temporary seeding will be considered on a case-by-case basis.

- f. Mulch. Mulch shall be applied within 24 hours following completion of seeding. In areas of interim reclamation that used drill-seeding or broadcast-seeding/raking, mulch shall consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil. Hydromulching shall be used in areas of interim reclamation where crimping is impracticable, in areas of interim reclamation that were hydroseeded, and in areas of temporary seeding regardless of seeding method.

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

- g. 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 authorized officer. Biodegradable straw matting, bales, or wattles of weed-free straw or weed-free native grass hay, or well-anchored fabric silt fence shall be used on cut-and-fill slopes and along drainages to protect against soil erosion. Additional BMPs shall be employed as necessary to reduce erosion and offsite transport of sediment.
- h. 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 authorized officer will approve the type of fencing.
- i. Monitoring. The operator shall conduct annual monitoring surveys of reclaimed areas and shall submit an annual monitoring report to the authorized officer 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 authorized officer.

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 Energy 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 by **December 31**. Contact Beth Brenneman, Glenwood Springs Energy Office Ecologist, at 970-947-5232 or beth_brenneman@blm.gov.
9. Raptor Nesting. Raptor nest surveys in the project vicinity resulted in the location of one or more raptor nest structures within 0.25 mile of a well pad and 0.125 mile of an access road, pipeline, or other surface facility. To protect nesting raptors, a 60-day Timing Limitation (TL) shall be applied to the initiation of construction [or drilling] activities within the buffer width[s] specified above. This TL shall apply during the period April 1- May 30. An exception to this TL may be granted for any year in which a subsequent survey determines one of the following: (a) the nest is in a severely dilapidated condition or has been destroyed due to natural causes, (b) the nest is not occupied during the normal nesting period for that species, (c) the nest was occupied but subsequently failed due to natural causes, or (d) the nest was occupied but the nestlings have fledged and dispersed from the nest. In the case of a dilapidated nest or one that was destroyed due to natural causes, the TL shall apply to any alternate or replacement nest within the buffer widths specified above, unless an exception is granted for the alternate or replacement nest for one of the reasons listed. Contact Jeff Cook, Glenwood Springs Energy Office Wildlife Biologist, at 970-947-5231 or jeffrey_cook@blm.gov).
10. 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. Several established methods to prevent bird access are known to be effective, such as netting or bird-balls. However, the USFWS has determined that the use of flagging is ineffective in deterring birds from using ponds or pits and provides no assurance of compliance with the MBTA. Regardless of the method used, it should be employed as soon as practicable after the pit has begun receiving liquids. At a minimum, the method 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 U.S. Fish and Wildlife Service. For further assistance, contact Creed Clayton, USFWS Biologist assigned to the Glenwood Springs Energy Office, at 970-947-5219 or creed_clayton@fws.gov, and visit <http://www.fws.gov/mountain-prairie/contaminants/oilpits.htm>.
11. Birds of Conservation Concern: Pursuant to BLM Instruction Memorandum 2008-050, all surface-disturbing activities are prohibited from May 1 to June 30 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 or

otherwise present within 10 meters of the area to be disturbed. 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. Contact Jeff Cook, Glenwood Springs Energy Office Wildlife Biologist, at 970-947-5231 or jeffrey_cook@blm.gov).

12. 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.
13. Ips Beetle. To avoid mortality of pinyon pines due to infestations of the *Ips* beetle, any pinyon trees damaged during road, pad, or pipeline construction shall be chipped after being severed from the stump or grubbed from the ground, buried in the toe of fill slopes (if feasible), or cut and removed from the site within 24 hours to a location approved by the Colorado State Forest Service.
14. 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.

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 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).

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

Above-ground facilities shall be painted a natural color selected to minimize contrast with adjacent vegetation or rock outcrops. The color shall be specified by the BLM.

SITE-SPECIFIC CONDITIONS OF APPROVAL

Rulison Produced Water and Frac Plan

T. 6 S., R. 94 W., Sections 18 & 19

1. An archaeological monitor is required for the section of pipeline construction which passes through the Anvil Points Town Site in Section 19, T. 8 S., R. 94 W. The monitor shall be a representative of an archaeological firm qualified and permitted to do such archaeological work within the Glenwood Springs Field Office area. The proponent should be advised that this process can be time consuming and costly.
 - a. No ground-disturbing construction activities (topsoiling, grading, ditching, etc.) shall begin prior to the archaeologist's arrival. The proponent is responsible for notifying the archaeological firm at least 72 hours in advance any ground disturbance in the specified areas. The proponent is responsible for all construction delays and or damage to cultural manifestations due to insufficient notification of the Archaeological Contractor, noncompliance with the following procedures, or damage to cultural manifestations.
 - b. Archaeological monitoring shall involve on-the-ground visual inspection of all construction for the pipeline within the above specified area. The archaeologists shall follow all the ground-disturbing equipment at a cautionary distance, allowing time for the construction dust to settle and for visible detection of buried cultural features to occur. All ground-disturbing activities in the vicinity of identified feature(s) will be halted, and a buffer area at least 100 feet from the identified feature(s) shall be protected from any additional disturbance until such time as the feature(s) are mitigated via data recovery. Appropriate samples for analyses to determine cultural/temporal affiliation, subsistence, at least one stratigraphic profile shall be made for each feature identified, and paleoenvironmental reconstructions will be taken as appropriate. Periodic reporting to the BLM archaeologist of progress and findings shall be completed on a weekly or more frequent schedule as deemed necessary by the BLM authorized officer.
 - c. Once all ground-disturbing activity is complete, the archaeological contractor shall produce and submit one draft written monitoring report to GSFO BLM. Upon acceptance of the report, two copies of a final report shall be submitted, one for the BLM and one to be forwarded by BLM to the SHPO. This report must be in a contextual framework that is compatible with known archaeological knowledge of the area and the Northern Colorado River Basin Context.
2. Three paleontological discovery sites are mapped within the immediate vicinity of the RWF 333-18 well pad. Although on private land, care should be taken when working in this area regarding uncovering additional paleontological resources.