**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 DOI-BLM-CO-N040-2009-0039

**Project:** Two new natural gas wells would be drilled and ancillary facilities would be constructed on Federal lease COC62160. The proposed wells would be directionally drilled from existing well pad RWF 13-19 approximately 8 miles northeast of Parachute, Garfield County, Colorado.

**Location:** NWSW, Section 19, Township 6 South, Range 94 West, Sixth Principal Meridian.

**Proposal:** Williams Production RMT Company proposes to directionally drill the following two wells from the existing RWF 13-19 location described above into Federal Lease COC62160:

Federal RWF 314-19 Federal RWF 514-19

To accommodate the additional wells, the pad would have to be rebuilt and the interim reclamation disturbed. The new pad size would be approximately 2.5 acres and would be constructed within the existing limits of disturbance. The drilling fluids would be disposed of in a reserve pit onsite. The wells would be fracture-stimulated using water stored on the pad in tanks. If necessary, water tanks would be placed on the RWF 23-19 pad and a temporary surface water supply line placed along the road to supply additional water to the wells on the RWF 13-19 pad. Water and condensate would be piped to tanks located on the RWF 23-19 (see Figure 1). A small amount of new disturbance would occur on the RWF 23-19 pad to accommodate the water and condensate tanks (see Figure 2).

**Lease Stipulations and Conditions of Approval:** All stipulations attached to Federal leases COC62160 remain in effect (see Table 1).

Conditions of Approval (COAs) for the proposed action will be attached to individual Applications for Permit to Drill (APDs) for the new wells cited above.

**NEPA Compliance:** The following categories of Categorical Exclusions pursuant to Section 390 of the Energy Policy Act (Act of 2005) apply to this proposal:

Category 1: "*Individual Surface disturbance of less than five acres so long as the total 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.*" The location was analyzed in the Wheeler to Webster Geographic Area Plan for Gas Wells, signed in July 2002.

Category 2: "Drilling *an oil and gas location or well pad at a site at which drilling has occurred within five (5) years prior to the date of spudding the well.* A well at the RWF 13-19 pad location (RWF 413-19) was spud on May 25, 2005.

Category 3: "*Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan or document was approved within five (5) years prior to the date of spudding the well.*" The proposed location is within the Roan Plateau Planning Area. Existing leased

areas were identified and drilling was analyzed in this area in the Roan Plateau Resource Management Plan Amendment and Environmental Impact Statement. The Record of Decision for the Roan Plateau Plan was signed on June 8, 2007.

**Prepared by:** Bridget Kobe Clayton, Natural Resource Specialist

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

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

Feb 10, 2009
Date

**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.6S, R.94W:<br>Sec. 19: Lots 3,4 | **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. *The areas immediately adjacent to the riparian vegetation are most important to the function of the riparian zone and will be avoided.* |
| T. 6S, R. 94 W,<br>Sec. 19: Lots 3-8, 13-15, | **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).<br><br>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 sedimentation and siltation of nearby surface waters.<br>Specific performance objectives for the plan include:<br>• Limitation of disturbance to 3.0 acres per pad;<br>• Limitation of interim "in use" area to 0.5 acres per pad; and<br>• 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.<br>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). |
| T. 6S, R. 94 W,<br>Sec 19: Lots 7, 8, 13-15 | **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. 6S, R 94W,<br>Sec. 19: Lots 3-5, 7, 8, 13-15 | **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.6S, R.94W:<br>Sec. 19: Lots 5-7; 15 | **NSO:** To maintain site stability and site productivity, on slopes greater than 50% (does not apply to pipelines).<br>**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.6S, R.94W:<br>Sec. 19: Lots 6, 7, 15 | **NSO: I-70 Viewshed.**<br>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 of 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. *See Lease COC62160 for further details.* |
| 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. |

Only sections included in the proposed action (surface and downhole) are specifically identified in the lease table. Refer to lease COC62160 for all applicable locations and stipulations.

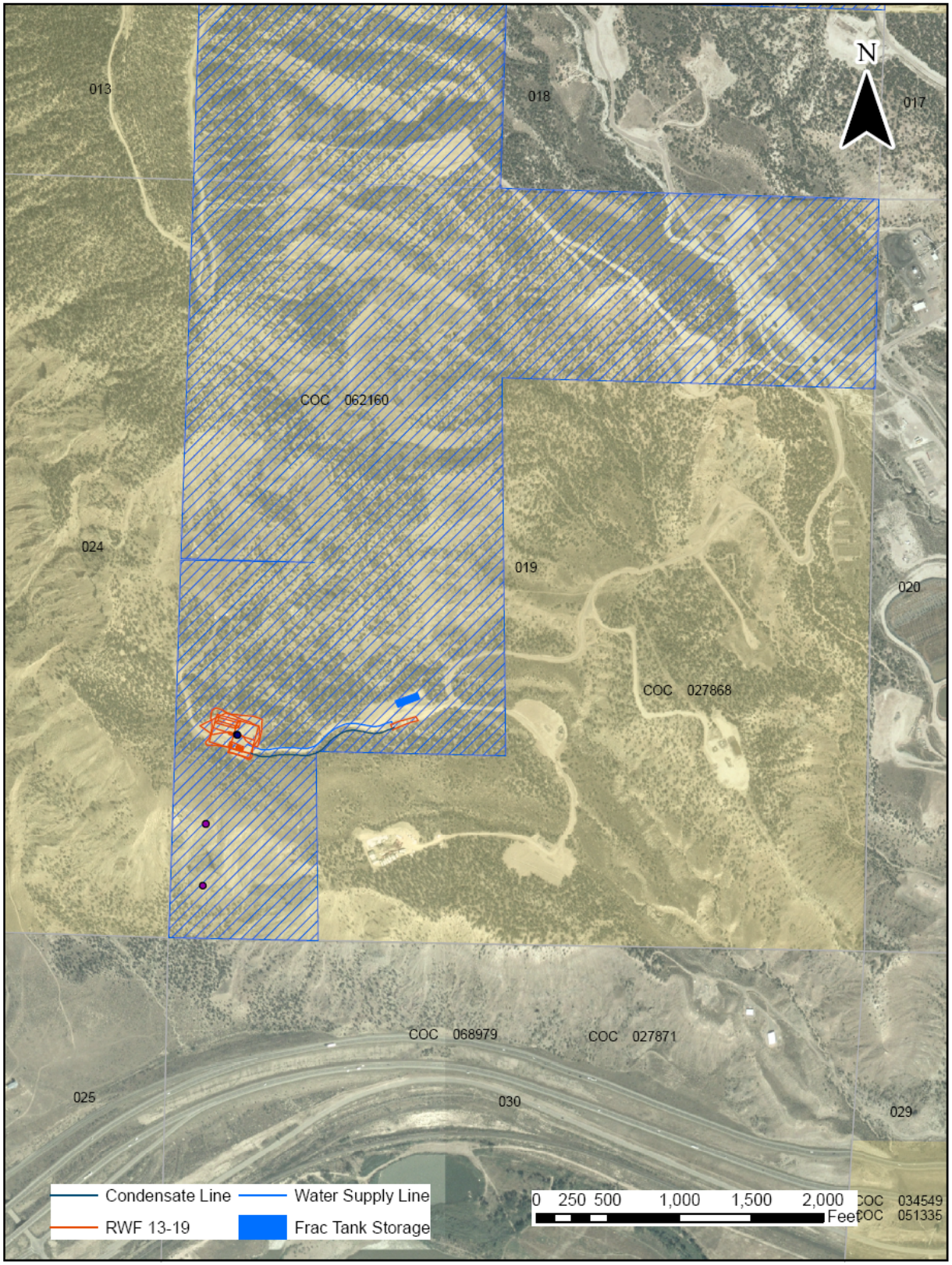
N
013
018
017
COC 062160
024
019
020
COC 027868
COC 068979
COC 027871
025
030
029
COC 034549
COC 051335
Condensate Line
Water Supply Line
RWF 13-19
Frac Tank Storage
0 250 500 1,000 1,500 2,000
Feet

**Figure 1.**

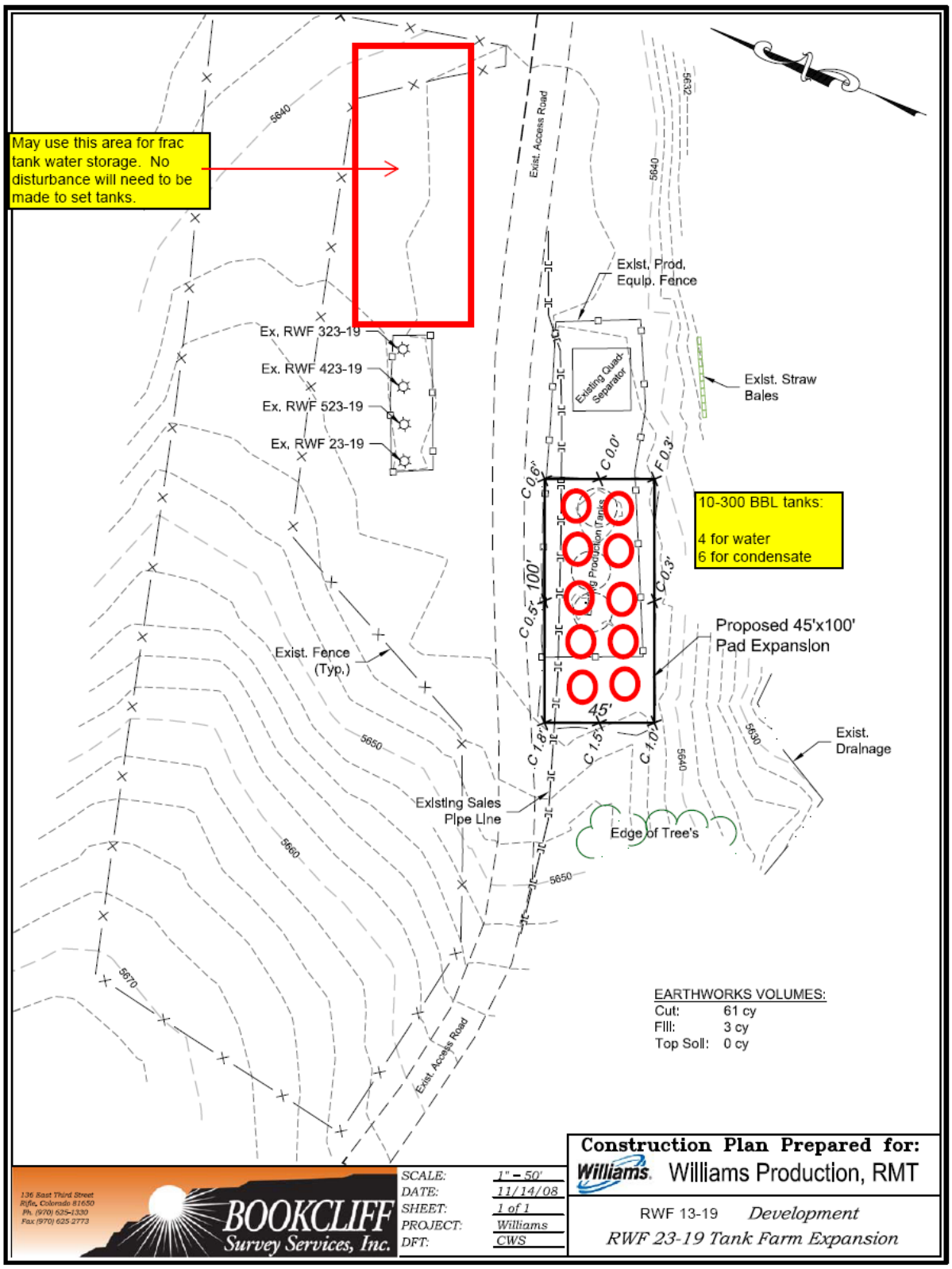
May use this area for frac tank water storage. No disturbance will need to be made to set tanks.
Exist. Access Road
Exist. Prod. Equip. Fence
Existing Quad-Separator
Exist. Straw Bales
Ex. RWF 323-19
Ex. RWF 423-19
Ex. RWF 523-19
Ex. RWF 23-19
10-300 BBL tanks:
4 for water
6 for condensate
Existing Production Tanks
Proposed 45'x100' Pad Expansion
Exist. Fence (Typ.)
Exist. Drainage
Existing Sales Pipe Line
Edge of Tree's
EARTHWORKS VOLUMES:
Cut: 61 cy
Fill: 3 cy
Top Soil: 0 cy
Construction Plan Prepared for:
Williams Production, RMT
RWF 13-19 Development
RWF 23-19 Tank Farm Expansion
BOOKCLIFF Survey Services, Inc.
SCALE: 1" = 50'
DATE: 11/14/08
SHEET: 1 of 1
PROJECT: Williams
DFT: CWS

**Figure 2.**

# SURFACE USE CONDITIONS OF APPROVAL

**Site-Specific COAs for the RWF 13-19 Pad**

1. The northwest corner of the pad shall be rounded as needed to reduce the amount of cut in this corner relative to what is shown on plat #2.

2. Topsoil and pad spoils windrowed along the north edge of the pad shall not be placed closer than five feet from the edge of the steep slope to the north to prevent any material being transported into the adjacent drainage, and to allow room for BMP installation.

**Standard Surface Use COAs**

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 or directed by the BLM authorized officer. The level and type of treatment (watering or application of various dust agents, surfactants, and road surfacing material) may be changed in intensity and must be approved by the BLM authorized officer.

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 that disturbs any flowing stream 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 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, Colorado/Gunnison Basin Regulatory Office, recommends designing drainage crossings for the 100-year event. Contact USACE at 970-243-1166.

   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 the USACE Colorado/ Gunnison Basin Regulatory Office at 970-243-1166.

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.

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 submitted to the BLM Glenwood Springs Energy Office Ecologist 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 reseedings 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 may 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 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**.

9. 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 annually. To 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.

10. 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. 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 May1-June 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.

11. 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 harass, harm, 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 reserve pits, produced water pits, and evaporation pits, that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds, and raptors) during completion and after completion activities have ceased. Several established methods to prevent bird access are known to work. Methods may include but are not limited to netting, the use of bird-balls, or other alternative methods that effectively prevent bird access/use. Regardless of the method used, it should be applied within 24 hours after completion activities have begun. All mortality or injury to species protected by the Migratory Bird Treaty Act shall be reported immediately to the BLM project lead and to the USFWS representative in the BLM Energy Office at 970-947-5219 and visit http://www.fws.gov/mountain-prairie/contaminants/oilpits.

12. 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 audial 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.

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. *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.

15. 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.

16. 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).

17. 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 authorized officer due to other resource concerns—and shall be placed to maximize reshaping of cut-and-fill slopes and interim reclamation of the pad.

    Above-ground facilities shall be painted Covert Green (Standard Environmental Colors Chart CC-001: June 2008) to minimize contrast with adjacent vegetation or rock outcrops.

**DOWNHOLE CONDITIONS OF APPROVAL**
**Applications for Permit to Drill**

**Company/Operator:** Williams Production RMT Company

**Surface Location:** NWSW, Section 19, Township 6 South, Range 94 West, 6th P.M.

| Well Name | Well No. | Bottomhole Location | Lease |
|---|---|---|---|
| RWF | 514-19 | SWSW Sec. 19, T. 6S, R. 94W. | COC62160 |
| RWF | 314-19 | SWSW Sec.19, T. 6S, R. 94W. | COC62160 |

1. Twenty-four hours *prior* to (a) spudding, (b) conducting BOPE tests, (c) running casing strings, and (d) within twenty-four hours *after* spudding, the GSEO shall be notified. One of the following GSEO's inspectors shall be notified by phone: Steve Ficklin at 970-947-5213, Julie King shall at 970-947-5239, and Todd Sieber at 970-947-5220.

2. A GSEO petroleum engineer shall be contacted for a verbal approval prior to commencing remedial work, plugging operations on newly drilled boreholes, changes within the drilling plan, changes or variances to the BOPE, deviating from conditions of approval, and conducting other operations not specified within the APD. Please contact Dane Geyer at 970-947-5229 (office) or 970-589-6887 (cell) for verbal approvals. As a secondary contact, Bob Hartman may be contacted at 970-244-3041 (office) or 970-250-7002 (cell).

3. If a well control issue arises (e.g. kick, blowout, or water flow), casing failure occurs, or an increase in bradenhead pressure occurs during fracturing operations, Dane Geyer shall be notified within 24 hours from the time of the event.

4. The BOPE shall be tested and conform to Onshore Order #2 for a **3M** system.

5. A casinghead rated to 3,000 psi or greater shall be utilized.

6. An electrical/mechanical mud monitoring equipment shall be functional prior to drilling out the next shoe. As a minimum, this shall include a pit volume totalizer, stroke counter, and flow sensor.

7. Gas detecting equipment shall be installed in the mud return system, prior to drilling out the next shoe, and hydrocarbon gas shall be monitored for pore pressure changes.

8. A gas buster shall be functional and all flare lines effectively anchored in place, prior to drilling out the next shoe. The discharge of the flare lines shall be a minimum of 100 feet from the well head and targeted at bends. The panic line shall be a separate line (not open inside the buffer tank) and effectively anchored. All lines shall be downwind of the prevailing wind direction and directed into a flare pit, which cannot be the reserve pit. The flare system shall use an automatic ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and maintain a continuous flare.

9. Prior to commencing fracturing operations, the production casing shall be tested to the maximum anticipated surface fracture pressure and held for 15 minutes. If leak-off is found, Dane Geyer shall be notified within 24 hours of the failed test, but prior to proceeding with fracturing operations. The

test shall be charted and set to a time increment as to take up no less than a quarter of the chart per test. The chart shall be submitted with the well completion report.

10. On the first well drilled on this pad, a triple combo shall be run from TD to the surface casing shoe. This log shall be in accordance with 43 CFR 3162.4(b), which states that the operator shall submit a complete set of electrical/mechanical logs in .LAS format with standard Form 3160-4, Well Completion or Recompletion Report and LOG. Please contact Karen Conrath at 970-947-5235 or karen_conrath@blm.gov for clarification.

11. As a minimum, cement shall be brought to 200 feet above the Mesaverde. Prior to commencing fracturing operations, a CBL shall be run (from TD to 200 feet above the TOC) and an electronic copy submitted to the GSEO. If the TOC is lower than required or the cement sheath of poor quality, then, within 48 hours from running the CBL and prior to commencing fracturing operations, a GSEO petroleum engineer shall be notified for further instruction.

12. Submit the (a) mud/drilling log (e.g. Pason disc), (b) driller's event log/operations summary report, (c) production test volumes, (d) directional survey, and (e) Formation Integrity Test results with the well completion report. Please contact Dane Geyer for clarification.