

**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-N040-2009-0072

Project: Nineteen natural gas wells would be drilled and ancillary facilities would be constructed on Federal lease COC62161. The wells would be directionally drilled from existing well pad DOE 1-W-28. All proposed wells and ancillary facilities would be located on Federal surface approximately 5 miles northeast of Parachute, Garfield County, Colorado.

Location: SWNE, Section 28 and SESE 28, Township 6 South, Range 95 West, Sixth Principal Meridian.

Proposal: Williams Production RMT Company (Williams) proposes to directionally drill the following nineteen wells from the existing Federal DOE 1-W-28 location described above:

PA 344-21	PA 444-21	PA 544-21	PA 41-28	PA 42-28
PA 43-28	PA 332-28	PA 341-28	PA 342-28	PA 343-28
PA 431-28	PA 432-28	PA 433-28	PA 441-28	PA 442-28
PA 531-28	PA 532-28	PA 541-28	PA 542-28	

All nineteen wells will access Federal Lease COC61261 (see Table 1 for Lease Stipulations).

To accommodate the additional wells, the DOE 1-W-28 pad would be rebuilt and the interim reclamation disturbed. The new pad size would be approximately three acres. The wells would be fracture stimulated from a frac pit on the PA 33-28 well pad (see Figure 1). A water surface line would be installed between the frac pit and the DOE 1-W-28 pad to supply water for drilling and completion. This line would tie into an existing water supply line (via a temporary surface water line) that ultimately supplies water from the Grand Valley evaporation pond located in Section 36 (T6S, R96W). Cuttings from the wells drilled on the DOE 1-W-28 pad would be dried in a small pit constructed on the pad and subsequently disposed of in a cuttings trench constructed along the DOE 1-W-28 access road (Trench #3 – see Figure 1). Total amount of acres disturbed for the cuttings trenches would be approximately two acres.

Lease Stipulations and Conditions of Approval: The surface location of the wells is within Federal Lease COC62161 and therefore stipulations attached to this lease would remain in effect (see Table 1). Conditions of Approval (COAs) for the proposed action would be attached to individual Applications for Permit to Drill (APDs) for the new wells cited above. The COAs will also apply to the offsite cuttings trench.

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 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 location was analyzed in the Wheeler to Webster Geographic Area Plan for Gas Wells, signed in July, 2002. Subsequently, the addition of two wells to the location was addressed in the Wheeler to Webster Geographic Area Plan signed in May 2005.

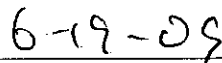
The proposed location is also within the Roan Plateau Planning Area. Existing leased areas were identified and drilling analyzed in this area in the Roan Plateau Resource Management Plan Amendment and Environmental Impact Statement. The Record of Decision for the Roan Plateau Plan was signed on June 8, 2007.

Prepared by: Bridget 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



Date

Table 1. Lease Stipulations and Lease Notices, Federal Lease COC62161 (1999)

T. 6S., R. 95W., 6th PM

See lease for complete legal descriptions

Description of Lands	Stipulations
Sec. 28: W2NW, N2SE	<p>Controlled Surface Use (CSU): 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 well pads, 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 zones. Such measures will be used on the nature, extent, and value of the riparian or wetland area. In general, the areas immediately adjacent to the riparian vegetation are most important to the function of the riparian zone and will be avoided.</p>
Sec. 28: Lots 1-4; Sec 28: W2W2, N2SE	<p>Controlled Surface Use (CSU): Erosive Soil and Slopes > 30%: special design, construction, operation and reclamation measures will be required to limit the amount of surface disturbance, to reduce erosion potential, to maintain site stability and productivity, and to insure successful reclamation in identified areas of highly erosive soils and of slopes greater than 30%. Highly erosive soils are soils in the “severe” and “very severe” erosion classes based on NRCS mapping. Areas identified in the RMP are included (Erosion hazard areas and water quality management areas).</p> <p>The surface use plan of the APD submitted 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, land sliding, slumping, and highwall [cutslope] degradation, and controlling erosion to protect the site and adjacent areas from accelerated erosion and sedimentation and siltation of nearby water sources.</p> <p>Specific performance objectives for the plan include:</p> <ul style="list-style-type: none"> • Limitation of total disturbance to 3.0 areas for the wellpad; • Limitation of the interim “in use” area to 0.5 areas; and • Maximizing the area of interim reclamation that is shaped to a grade of 3:1 (h:v) or less; any planned highwall must be demonstrated to be safe and stable and include enhanced reclamation and erosion prevention measures as needed. <p>Operator must submit an evaluation of the site’s reclamation potential based on problematic characteristics of the site (slope, aspect, vegetation, depth of soils, soil salinity, and alkali content). When the proposed site is comparable to sites where reclamation has not been successful, the operator will be required to make adjustments to reclamation techniques. Special measures might include: locating production facilities off site; building roads to higher standards, including surfacing; constructing sediment catchments; reclaiming the reserve pit immediately after use; and applying fertilizer, mulches, soil additives and geotextile fabrics. The Authorized Officer will evaluate plans submitted by the operator and approve a design and any special measures that best accomplish the performance objectives, achieving a reasonable balance of site stability and re-vegetation potential and minimizing overall disturbance.</p>
Sec. 28: Lots 1- 4; Sec. 28: W2W2, N2SE	<p>Visual Resource Management (VRM) Class II Areas: Protection may include special design requirements, relocation of operations by more than 200 meters, and other measures to retain the overall landscape character. Such measures would be designed to blend the disturbance in with natural landscape so that it does not attract attention from key observation points. BLM acknowledges that activities on private lands may alter the landscape character and such modifications will be considered when evaluating mitigation proposals relative to the visual quality of the overall landscape.</p>

Sec. 28: Lots 1- 4; Sec. 28: W2W2, N2SE	Timing Limitation: 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.
Sec. 28: W2NW Sec. 28: NWSE	No Surface Occupancy (NSO): Riparian and Wetland Zones: To maintain the proper function of riparian zones, activities associated with oil and gas exploration and development, including roads, transmission lines and storage facilities, are restricted to an area beyond the outer edge of the riparian vegetation. Exception Criteria: a) An exception may be granted if the Authorized Officer determines that the activity will cause no loss of riparian vegetation of like species and age class; b) Within the riparian vegetation, an exception is permitted for stream crossings, if an area analysis indicates that no suitable alternative is available.
Sec. 28: Lots 1- 4; Sec. 28: NWNW	NSO: Steep Slopes: To maintain site stability and site productivity, on slopes greater than 50% (does not apply to pipelines). Exception Criteria: In the event the lessee demonstrates that operations can be conducted w/o 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 provides a high level of certainty that such operations can be conducted consistent with the objectives of the GSRA Reclamation Policy. Must demonstrate previous success with reclamation in similar sites.
Sec. 28: Lots 1, 2, 4	NSO: I-70 Viewshed on Slopes Steeper than 30%. Exception Criteria: An exception would be granted if protective measures can be designed to accomplish VRM Class II objectives.
ALL LANDS within lease	Lease Notice (LN): An inventory shall be conducted by an accredited paleontologist approved by the Authorized Officer prior to surface-disturbing activities in <u>Class I and Class II Paleontological Areas</u> .
ALL LANDS within lease	LN: 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 <u>biological inventory</u> will be required prior to approval of operations.
ALL LANDS within lease	LN: All leases in the GSRA are required to report to the Authorized Officer annually on the <u>ongoing progress of reclamation</u> at locations developed on the lease.
ALL LANDS within lease	LN: 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 their habitat. Such measures shall be developed in concert with BLM during the preparation of the EA. May include completion of habitat improvement projects designed to replace habitat lost through construction; reduction of human disturbance; using telemetry to collect well likely to be present. Measures to reduce impacts would generally be considered when well [pad] density exceeds four wells [pads] per 640 acres, or when road density exceeds 3 miles per 640 acres.
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 population centers throughout the GSRA, major BLM or county roads and state or Federal highways.

See Federal lease COC62161 for complete stipulations.

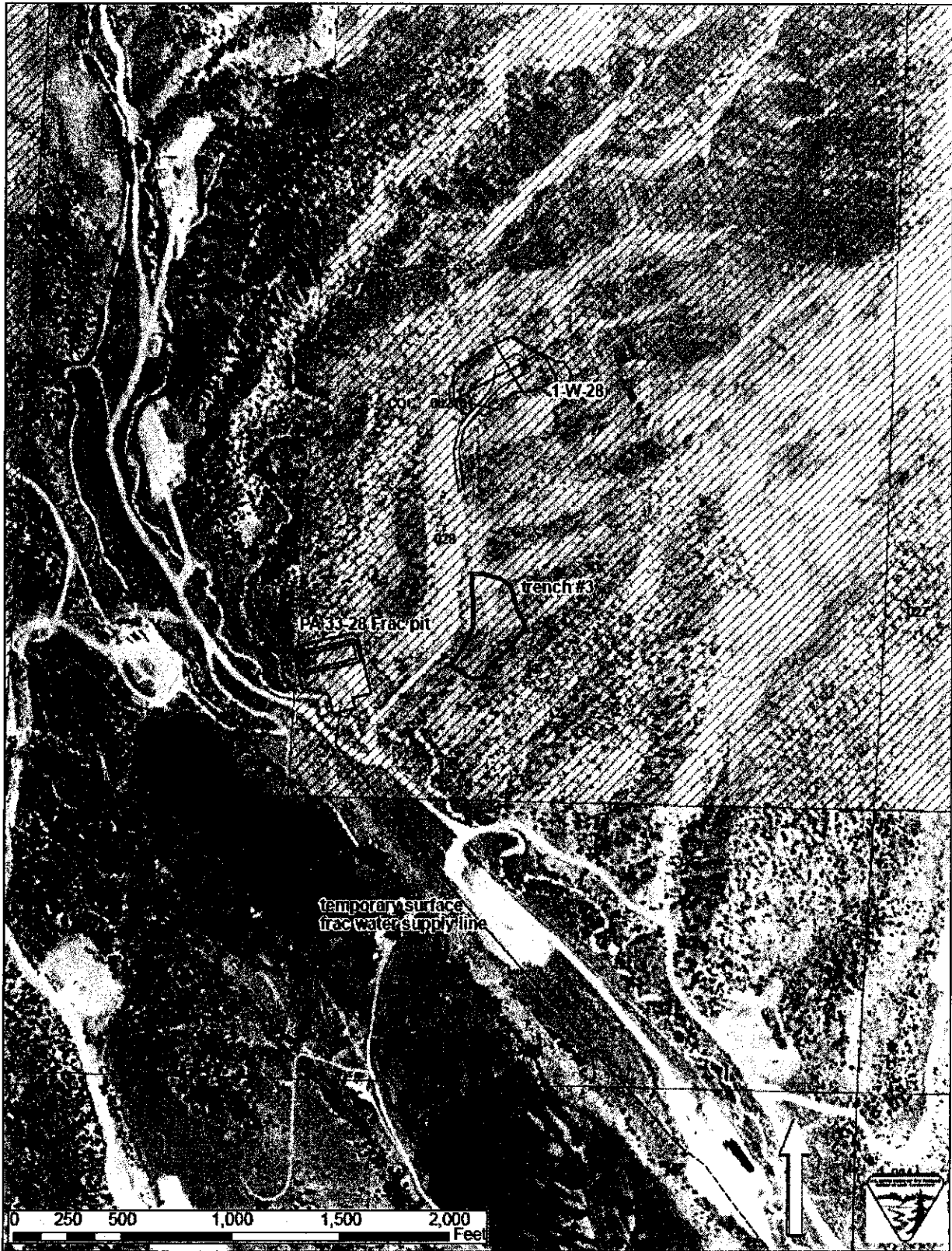


Figure 1

SITE-SPECIFIC CONDITIONS OF APPROVAL
Statutory Categorical Exclusion #DOI-BLM-CO-N040-2009-0072

SITE-SPECIFIC CONDITIONS OF APPROVAL

1. To protect adobe thistle (a BLM sensitive plant species) located along the east and west side of a portion of the existing access road, the following procedures will be met:
 - A pre-construction on-site meeting will be held a week prior to pad construction to discuss flagging of the adobe thistle population and the placement of a protective fence.
 - The adobe thistle located adjacent to the road will be fenced off from disturbance with orange mesh construction fencing along each side of the length of road where it occurs.

No direct impacts to the thistle will result from construction activities. The road corridor will not be widened through the section along which the adobe thistle occurs.

2. The presence of good Wasatch/DeBeque Formation bedrock found within the defined disturbance area facilitated a paleontological survey request. Results of that survey unearthed three (3) occurrences of fossil material identified within the proposed area of disturbance. It is also noted that there is another extremely significant vertebrate fossil locality found in Section 29 T6S.R95W that is nearly on strike with the fossil mammal-bearing unit at this well site. All ground disturbance during construction of the well site and pads shall be evaluated by a paleontological monitor for fossils, including plants, invertebrates, and particularly vertebrates. Any impact to vertebrate fossils during the well site construction should be immediately reported to the monitor for evaluation. The BLM authorized officer shall be notified immediately if significant vertebrate remains are impacted.
3. The inlet to the stormwater drainage culvert running beneath the pad shall be armored to prevent erosion of the northern edge of the pad.
4. The culvert to be installed beneath the pad shall be at least 32" in diameter. During interim reclamation, to the extent feasible, this culvert shall be removed and the existing drainage restored.
5. The existing culvert running beneath the access road to the southeast of the pad shall be repaired prior to its connection to the culvert to be constructed beneath the pad. The existing culvert has been damaged near its northwest end, such that it necks down to approximately 24" diameter.

STANDARD SURFACE USE CONDITIONS OF APPROVAL

The following standard surface use COAs are in addition to all stipulations attached to the respective Federal lease.

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 from 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 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 18 inches. Crossings of drainages deemed to be jurisdictional waters of the U.S. pursuant to Section 404 of the Clean Water Act may require additional culvert design capacity. Due to the flashy nature of area drainages and anticipated culvert maintenance, the U.S. Army Corps of Engineers (USACE) recommends designing drainage crossings for the 100-year event. Contact the USACE Colorado/Gunnison Basin Regulatory Office at 970-243-1199.

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 (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/Gunnison Basin Regulatory Office at 970-243-1199.
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 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 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.

- 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 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 all sites categorized as "operator reclamation in progress" and shall submit an annual monitoring report of these sites 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 to BLM by **December 1**.
9. Big Game Winter Range Timing Limitation. As stated in Federal Lease COC62161 (above), 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 which includes severe big game winter range and other high value winter habitat as mapped by CDOW.

To further reduce impacts to wintering big game, and to the extent practicable, remote sensing should be used for production monitoring, and any unavoidable monitoring or maintenance activities should be conducted between 9 a.m. and 3 p.m. These additional recommendations apply to the period from December 1 to April 30.

10. **Raptor Nesting.** Raptor nest surveys for the Cottonwood project area were conducted in May and June of 2008. Nine raptor nests were found in the project area with two nests within 0.25 miles of the pad. To protect nesting raptors, a 60-day Timing Limitation (TL) shall be applied to the construction of the pad within the buffer width specified above, if the activities would be initiated during the nesting period of April 15 – June 15. 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 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 U.S. Fish and Wildlife Service (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 USFWS representative in the BLM Energy Office at 970-947-5219 and visit <http://www.fws.gov/mountain-prairie/contaminants/oilpits.htm>.
12. **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 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. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 1 and continue into the 60-day period at the same location.
13. **Range Management.** Range improvements (fences, gates, reservoirs, pipelines, etc) shall be avoided during development of natural gas resources to the maximum extent possible. If range improvements are damaged during exploration and development, the operator will be responsible for repairing or replacing the damaged range improvements. If a new or improved access road bisects an existing livestock fence, steel frame gate(s) or a cattleguard with associated bypass gate shall be installed across the roadway to control grazing livestock.

14. 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.
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.

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 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 CO

Surface Location: SWNE, Section 28, Township 6 South, Range 95 West, 6th P.M.

<u>Well Name</u>	<u>Well No.</u>	<u>Bottomhole Location</u>	<u>Lease</u>
PA	432-28	SWNE Sec. 28, T. 6S., R. 95W.	COC62161
PA	433-28	NWSE Sec. 28, T. 6S., R. 95W.	COC62161
PA	41-28	NENE Sec. 28, T. 6S., R. 95W.	COC62161
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PA	342-28	SENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	542-28	SENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	343-28	NESE Sec. 28, T. 6S., R. 95W.	COC62161
PA	531-28	NWNE Sec. 28, T. 6S., R. 95W.	COC62161
PA	444-21	SESE Sec. 28, T. 6S., R. 95W.	COC62161
PA	541-28	NENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	441-28	NENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	544-21	SESE Sec. 21, T. 6S., R. 95W.	COC62161
PA	532-28	SWNE Sec. 28, T. 6S., R. 95W.	COC62161
PA	341-28	NENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	42-28	SENE Sec. 28, T. 6S., R. 95W.	COC62161
PA	431-28	NWNE Sec. 28, T. 6S., R. 95W.	COC62161
PA	344-21	SESE Sec. 21, T. 6S., R. 95W.	COC62161

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, William Howell may be contacted at 970-947-5221 (office) or 970-319-5837 (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.