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-N040-2009-0055

Project: Sixteen new 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 2-W-20. Two cuttings trenches and a fracing pit would be also constructed on Federal lease COC62161. The cuttings trenches would be located directly southeast of existing pad PA 33-28. All proposed wells and ancillary facilities would be located on Federal surface approximately 4 miles northeast of Parachute, Garfield County, Colorado.

Location: N½NE, Section 20 and N½SW, Section 28, Township 6 South, Range 95 West, Sixth Principal Meridian.

Proposal: Williams Production RMT Company (Williams) proposes to directionally drill the following sixteen wells from the existing Federal DOE 2-W-20 location described above:

Federal PA 44-17, Federal PA 344-17, Federal PA 444-17, Federal PA 544-17, Federal PA 414-16, Federal PA 514-16, Federal PA 441-20, Federal PA 541-20, Federal PA 442-20, Federal PA 542-20, Federal PA 432-20, Federal PA 532-20, Federal PA 31-20, Federal PA 331-20, Federal PA 431-20, Federal PA 531-20.

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

To accommodate the additional wells, the pad would have to be rebuilt and the interim reclamation disturbed. The new pad size would be approximately 2.9 acres and would include a slight expansion on the northwestern and southwestern corners of the pad. Existing pad PA 33-28, in Section 28, would also have to be rebuilt and interim reclamation disturbed. Pad PA 33-28 would be approximately 2.6 acres in size. A frac pit would be constructed on the reopened surface area of pad PA 33-28. A temporary surface water line would be installed from the PA 33-28 to DOE 2-W-20 pad for the water supply needed for drilling and completion. The cuttings would be disposed of in a cuttings trench constructed on location and two cuttings pits southeast of pad PA 33-28. A new 6-inch natural gas pipeline would be constructed in the existing ROW and tie into existing 12-inch and 4-inch pipelines in the main road.

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.

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: "*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.*" 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.

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 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: Rebecca Beavers, 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

5-27-09
Date

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

T. 6S., R.95W., 6th PM
Sec. 20: Lots 1, 4-9, NE/4NE/4, S/2NE/4, N/2SE/4
Sec. 28: Lots 1-4, W/2W/2, N/2SE/4

Description of Lands	Stipulations
Sec. 28: W2NW, N2SE	**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 based 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.
Sec. 20: Lots 1, 4-9; NENE, S2NE, N2SE Sec. 28: W2W2, N2SE	**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). 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 [cut slope] degradation, and controlling erosion to protect the site and adjacent areas from accelerated erosion and sedimentation and siltation of nearby water sources. Specific performance objectives for the plan include: • Limitation of total disturbance to 3.0 areas for the well pad; • 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 high wall must be demonstrated to be safe and stable and include enhanced reclamation and erosion prevention measures as needed. Operator must submit an evaluation of the site's reclamation potential based on problematic characteristics of the site (slope, aspect, and 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.
Sec. 20: Lots 1, 4-9; Sec. 20: NENE, S2NE, N2SE Sec. 28: W2W2, N2SE	**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.
Sec. 20: Lots 1, 4-9; Sec. 20: NENE, S2NE, N2SE; Sec. 28: Lots 1-4;	**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. **Exception Criteria:** Under mild winter conditions, the last 60 days of the seasonal limitation period may be

Sec. 28: W2W2, N2SE	suspended after consultation with the CDOW. Severity of the winter will be determined on the basis of snow depth, snow crusting, daily mean temperatures, and whether animals were concentrated on the winter range during the winter months. This limitation may apply to work requiring a Sundry Notice pending environmental analysis of any operational or production aspects.
Sec. 28: W2NW, 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. 20: Lots 4-6 and SWNE	**NSO: Wildlife Seclusion Areas:** To protect fourteen seclusion areas that provide high wildlife value: The Roan Cliffs, Cottonwood Gulch, and Webster Hill/Yellow slide Gulch (all in the NOSR Production Area); Hayes Gulch, Riley and Starkey Gulch, Riley Gulch, Crawford Gulch, Magpie Gulch, Paradise Creek, Coal Ridge, Lower Garfield, Jackson Gulch, Bald Mountain and Battlement Mesa. **Exception Criteria:** An exception may be granted based on approval by the Authorized Officer of a mitigation plan that suitably addresses the wildlife seclusion values at risk. These areas provide several unique qualities, such as an optimum mix of quality forage, cover and water; proximity to natural migration corridors; birthing areas; topographic features which moderate severe winter conditions; and seclusion from human intrusion.
Sec. 20: Lots 1, 4-9; NENE, S2NE, N2SE Sec. 28: Lots 1-4; NWNW	**NSO: Steep Slopes:** To maintain site stability and site productivity, on sloes 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. 20: Lots 4-8; S2NE, N2SE Sec. 28: Lots 1, 2, 4	**NSO: I-70 View shed 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 Class I and Class II Paleontological Areas.
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 biological inventory 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 ongoing progress of reclamation 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.

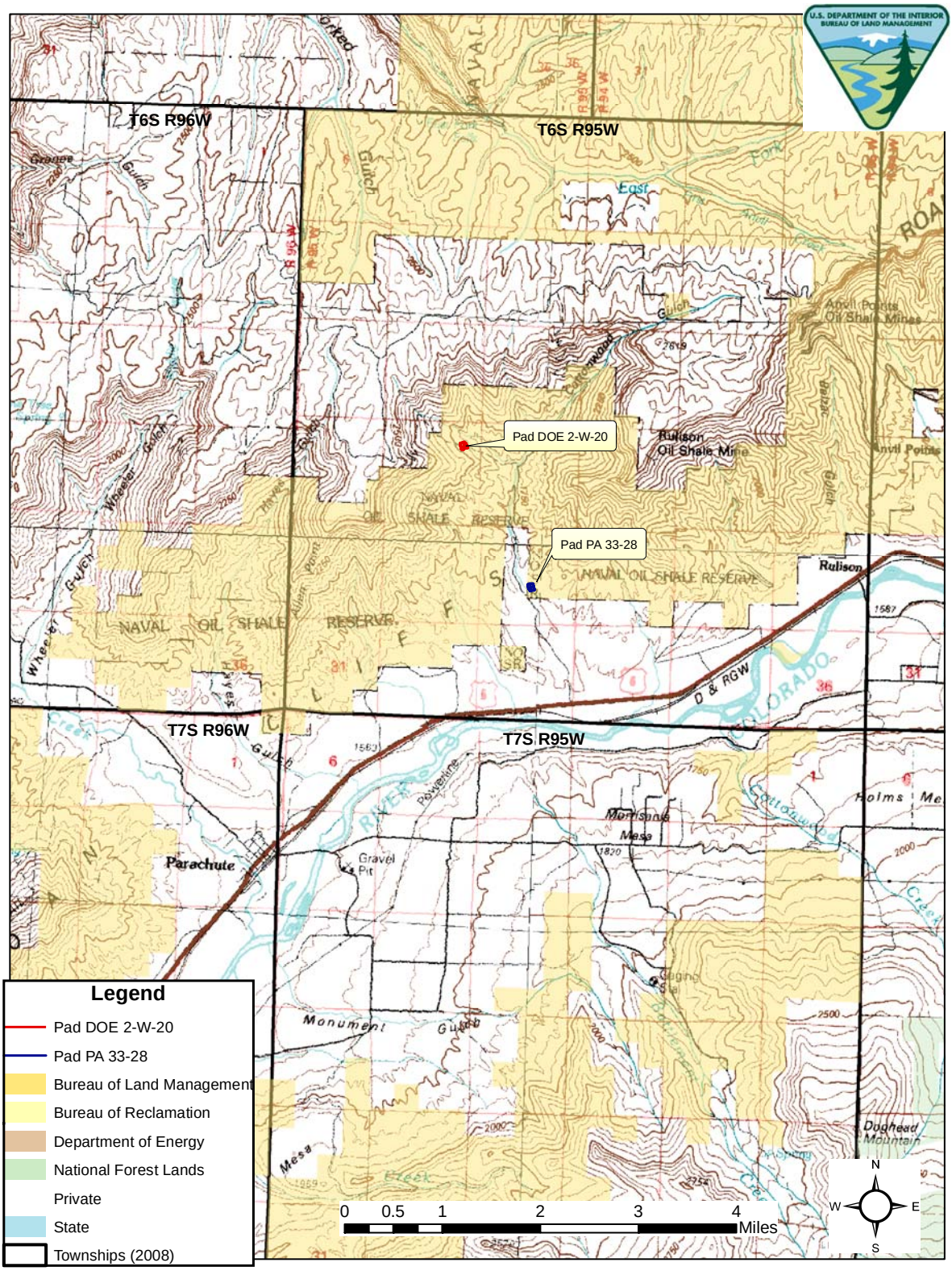

T6S R96W
T6S R95W
T7S R96W
T7S R95W
Pad DOE 2-W-20
Pad PA 33-28
Rulison
Rulison Oil Shale Mine
Anvil Points
Anvil Points Oil Shale Mines
NAVAL OIL SHALE RESERVE
Parachute
Gravel Pit
Morrisania Mesa
Holms Mesa
Monument Gulch
Dogshead Mountain
D & RGW
COLORADO
RIVER
Legend
Pad DOE 2-W-20
Pad PA 33-28
Bureau of Land Management
Bureau of Reclamation
Department of Energy
National Forest Lands
Private
State
Townships (2008)
0 0.5 1 2 3 4
Miles
N
W
E
S

Figure 2.


Geologist Information
General: Existing location, 16 new wells, 7 existing
Ownership: Fed Surface, Fed Minerals
SUA Status: N/A
Spacing Units: N/2 Section 20 (320 Acre Lay-down Unit)
Section 17 Unspaced – 4 Wells
Adjacent Owners: BLM
DOE 2-W-20
PA 33-28
Cuttings Trench
Centralized Water Tank Farm
0 2,900 5,800 8,700 11,600 Feet
20
Plan of Development
Access: Use existing access but modified across pad as shown.
Drilling: Efficiency rig
Cuttings: In cuttings trench on location and in the Cottonwood cuttings trenches near PA 33-28.
SIMOPS: Yes
Completion: Frac from PA 33-28 pad.
Flowback: Back to PA 33-28 pad.
Prod Equip: Production equipment to be on northern edge of pad.
Pipeline: New 6" gas/ 4" water pipeline will go down existing pipeline ROW and tie into existing 12"/4" pipelines in main road.
N
W
E
S
0 100 200 300 400 Feet
Legend
BLM
Cuttings Trench
Centralized Water Tank Farm
Road
Temporary Frac Line
Pipeline (Valley, Proposed)
Proposed Production Equipment Area
Existing Production Equipment
Existing Well
Proposed Daylight Line
Proposed Pad or Pit
Existing Pipeline
Existing Fence
Williams Production RMT
DOE 2-W-20 Plan of Development
T6S R95W, Section 20
Date Prepared: November 20, 2008
O:\Projects\PIC\Parachute\08\1031_DOE 2-W-20POD\POD.mxd klee 11/20/2008 3:29:56 PM

Figure 3.

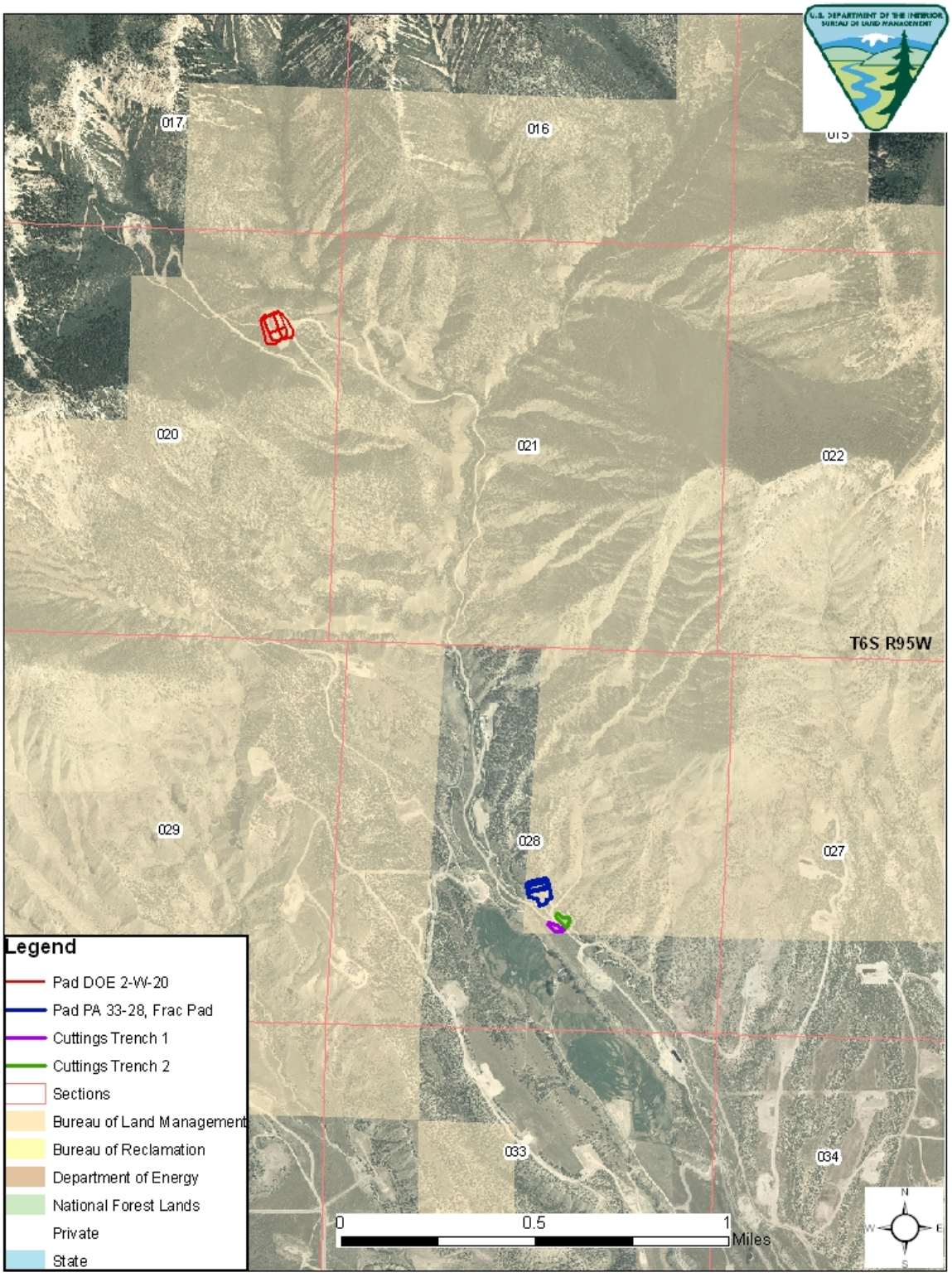
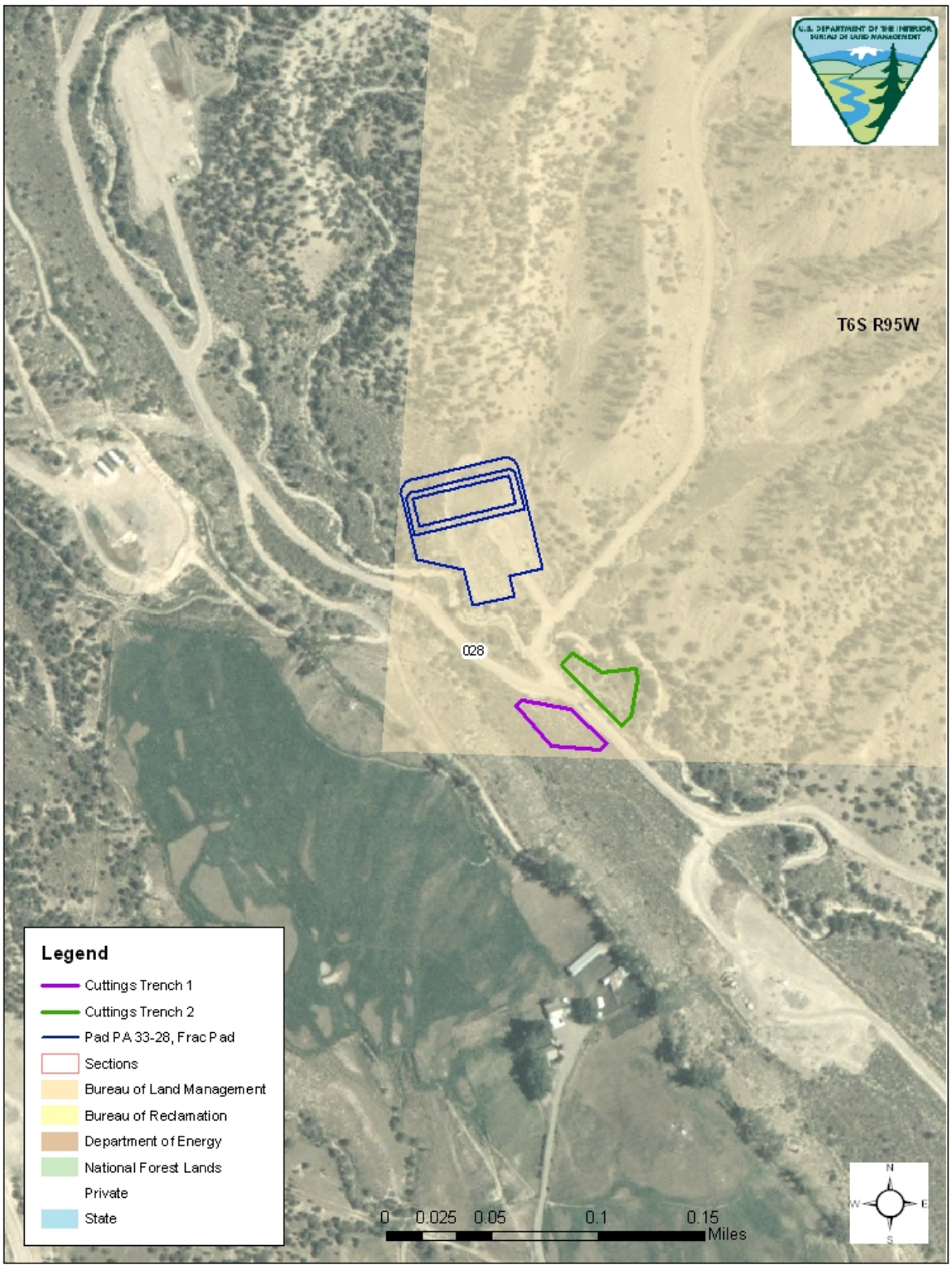

017
016
020
021
022
T6S R95W
029
028
027
033
034
Legend
Pad DOE 2-W-20
Pad PA 33-28, Frac Pad
Cuttings Trench 1
Cuttings Trench 2
Sections
Bureau of Land Management
Bureau of Reclamation
Department of Energy
National Forest Lands
Private
State
0
0.5
1
Miles
N
W
E
S

Figure 4.


T6S R95W
028
Legend
Cuttings Trench 1
Cuttings Trench 2
Pad PA 33-28, Frac Pad
Sections
Bureau of Land Management
Bureau of Reclamation
Department of Energy
National Forest Lands
Private
State
0 0.025 0.05 0.1 0.15
Miles
N
W
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S

SURFACE USE CONDITIONS OF APPROVAL
Statutory Categorical Exclusion #DOI-BLM-CO-N040-2009-0055

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, storm water 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 hydro seeded, 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. Hydro seeding and hydro mulching may be used in temporary seeding or in areas where drill-seeding or broadcast-seeding/raking are impracticable. Hydro seeding and hydro mulching 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. Hydro mulching shall be used in areas of interim reclamation where crimping is impracticable, in areas of interim reclamation that were hydro seeded, 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 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, 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 in the project vicinity resulted in the location of a raptor nest structure within 0.125 mile of a proposed surface pipeline. To protect nesting raptors, a 60-day Timing Limitation (TL) shall be applied to the construction of the pipeline 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 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 audible 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 cattle guard 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 as indicated on the plats attached to the APD, unless an alternative placement is approved by the authorized officer.

    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 and attached as a COA to individual APDs.

SITE-SPECIFIC COAS APPLICABLE TO PAD DOE 2-W-20

The following site-specific surface use COAs are in addition to the standard COAs applicable to all wells within the pad DOE 2-W-20 and all stipulations attached to the respective Federal leases.

1. During final reclamation of Pad DOE 2-W-20, the northern end of the pad shall be recontoured to approximate the surrounding hill slope.

2. Where Pad 33-28 impinges on the unnamed ephemeral drainage immediately to its east, a storm water ditch shall be constructed capable of moving storm water from a 25-year storm past the pad without causing erosion to the pad or allowing water to flow across the pad.

3. The cuttings trench on the southwest side of Route 8031 will be filled before any cuttings are placed in the trench on the northeast side of the road.

4. As the cuttings trench on the northeast side of Route 8031 is situated within a Riparian and Wetland Zone CSU area, the northern corner of this trench and associated stockpile area shall not impinge within 15 feet of the top bank of Cottonwood Creek.

DOWNHOLE CONDITIONS OF APPROVAL
Applications for Permit to Drill

Company/Operator: Williams Production RMT Company

Surface Location: NENE, Section 20, Township 7 South, Range 95 West, 6th P.M.

Well Name	Well No.	Bottomhole Location	Lease
PA	31-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	331-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	431-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	531-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	532-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	544-17	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	444-17	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	344-17	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	44-17	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	541-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	441-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	514-16	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	414-16	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	432-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	442-20	NENE Sec. 20, T. 7S., R. 95W.	COC62161
PA	542-20	NENE Sec. 20, T. 7S., 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 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. As a secondary contact, Dane Geyer at 970-947-5229 (office) or 970-589-6887 (cell) for verbal approvals.

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, Will Howell 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 trip tank, 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 hall 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, Will Howell 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 (open hole logs) shall be run from the base of the surface borehole to surface, and another run from TD to the surface casing shoe. Each open hole log shall be submitted to the GSEO within 24 hours after running. These logs shall be submitted digitally in LAS. Format. 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 of 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 Will Howell for clarification (970) 947-5221.