

**U.S. Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652**

Section 390 Categorical Exclusions for Oil and Gas Development, Exclusion No. 2

NEPA LOG NUMBER: DOI-BLM-CO-N040-2013-0063-CX (390)

A. Background

BUREAU OF LAND MANAGEMENT (BLM) OFFICE: Colorado River Valley Field Office (CRVFO), Silt, Colorado

CASEFILE/PROJECT NUMBER: Oil and Gas Lease COC62161 (surface and bottomholes), COC62163 (bottomholes)

PROPOSED ACTION TITLE/TITLE: Proposal to Drill 19 Federal Wells from Existing PA 22-21 Pad on BLM Land in Cottonwood Gulch Drainage Northeast of Parachute, Garfield County, Colorado. Authorized by Application for Permit to Drill (APD).

APPLICANT: WPX Energy Rocky Mountain LLC.

LOCATION OF THE PROPOSED ACTION: Township 6 South (T6S), Range 95 West (R95W), Section 21, SE¼NW¼, 6th P.M. The existing PA 22-21 pad is a ridgetop location situated on public land overlooking Cottonwood Gulch (Figure 1). The pad is located approximately 7 miles northeast of Parachute, Colorado. The frontage road on the north side of Interstate 70 (I-70) provides vehicle access to the project location.

DESCRIPTION OF PROPOSED ACTION: WPX Energy Rocky Mountain LLC (“WPX”) proposes to drill and develop 19 new Federal oil and gas wells from the existing PA 22-21 well pad located on BLM with underlying Federal minerals. The wells would be directionally drilled from the pad into the nearby Federal leases. The PA 22-21 pad presently supports 15 producing Federal oil and gas wells.

Road access to the pad is gained by traveling on the I-70 frontage road (U.S. Highway 6) approximately 3½ miles northeast from Parachute and driving north on the private field access road up Cottonwood Gulch for approximately another 3½ miles to the pad.

The additional wells will reach bottomhole targets that were initially planned from a new pad location (PA 41-21) in an undeveloped, secluded area of Cottonwood Gulch. Technological drilling advances have developed to allow longer bottomhole reaches from the existing PA 22-21 pad. The new wells on the PA 22-21 pad would be drilled outside of the big game winter timing stipulation listed on the Federal lease.

The pad was constructed in late summer 2010 with drilling and completion work following in 2011 for the initial 15 Federal wells now in production and the pad has remained in an “open” condition knowing that the PA 41-21 bottomhole targets were being planned from this location (Figure 2). The last well drilled at the PA 22-21 pad was the PA 11-21 well with an April 10, 2011 spud date.

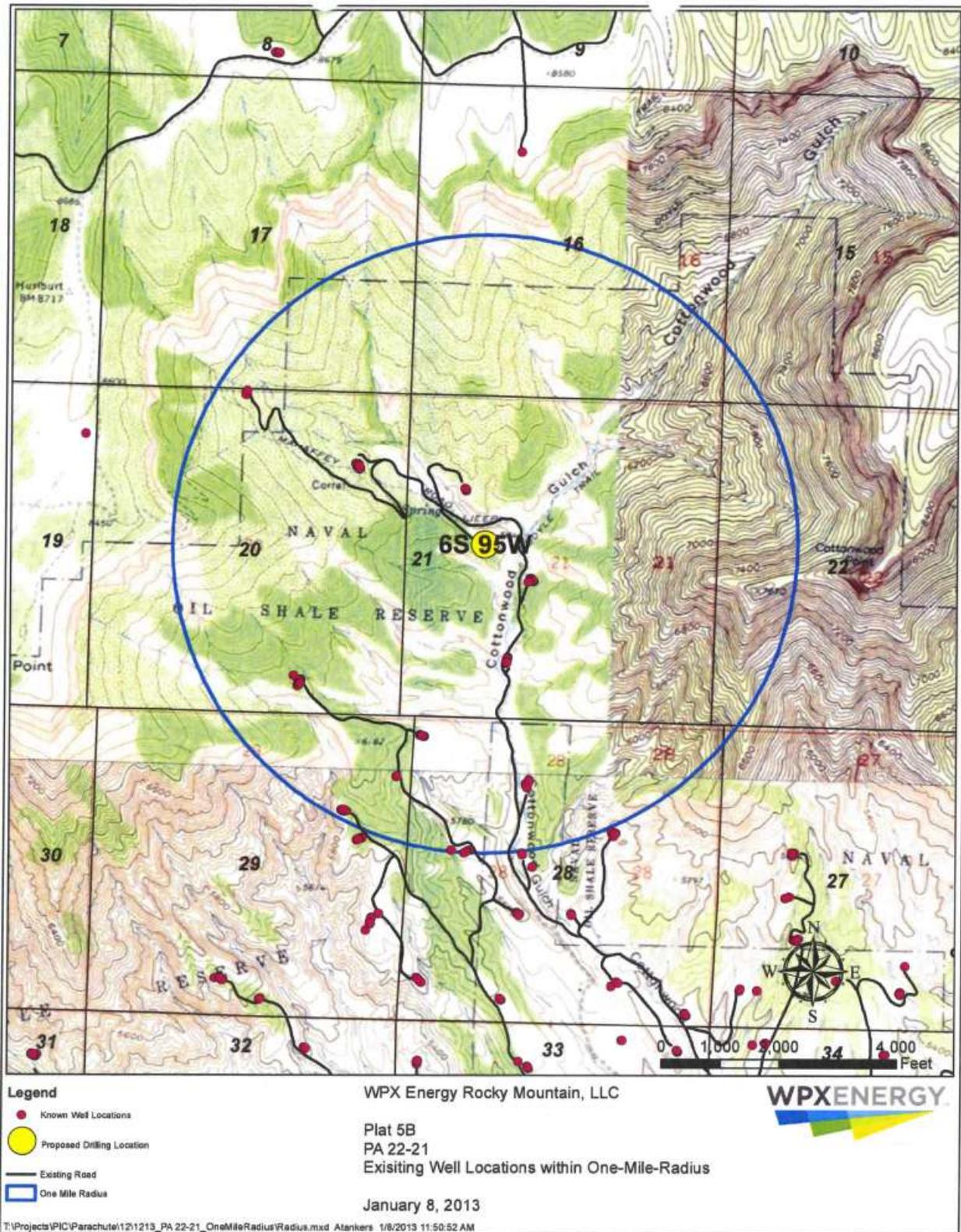


Figure 1. Project Location Map

As shown in the Table 1, no new disturbance would be needed to drill, complete and develop the 19 new wells. The PA 22-21 pad is presently unreclaimed with a total disturbance footprint from the initial drilling visit of 5.95 acres (Figure 2). The long-term surface disturbance for the pad comprising the working area for the producing wells, separators and storage tanks would be 1.95 acres

Table 1. Surface Disturbance Associated with PA 22- 21 Pad			
<i>Initial 2010 Disturbance</i>	<i>Proposed New Disturbance</i>	<i>Long-term Disturbance</i>	<i>Surface Ownership</i>
5.95 acres	N/A	1.95 acres	BLM

Existing roads and pipelines are adequate for this second drilling visit. Additional separator units and water and condensate storage tanks would be added to the north and west edges of the pad to serve the new wells. Remote well completion operations from the existing PA 33-28 Cottonwood Frac Pad would occur simultaneously during drilling operations. Existing surface frac lines running between the PA 22-21 pad and the PA 33-28 pad would continue to provide high-pressure water delivery and flowback for the frac jobs. Existing water delivery infrastructure would continue to serve the PA 33-28 frac operations without the use of water truck transports.

Drill cuttings developed from the wellbore drilling for the new wells would be periodically hauled to the existing Cottonwood Cuttings Trench for storage (Figure 3). Prior to interim reclamation of the Cottonwood Cuttings Trench, the cuttings would be tested and treated to satisfy COGCC Table 910-1 standards. Cuttings would be covered with a minimum of 3-foot-deep cap during the interim reclamation earthwork.

A road maintenance program would be required during the drilling, completion and production phases which includes, but is not limited to blading, ditching, culvert installation and cleanout, weed control, and gravel surfacing where excessive rutting or erosion may occur. Roads would be maintained in a safe and usable condition.

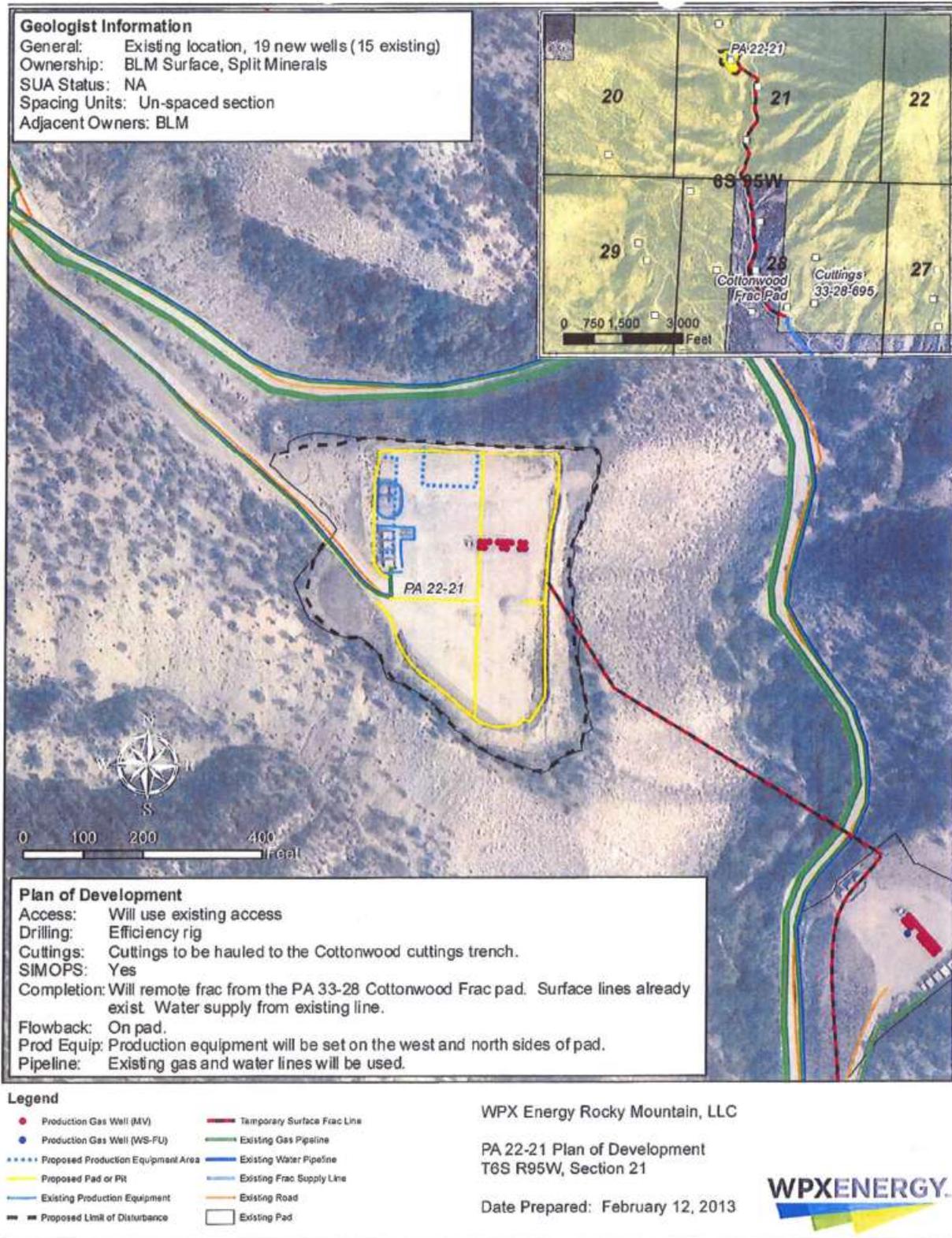
Resource surveys conducted for the initial 2010 PA 22-21 construction plan remain valid with the exception of a raptor survey which is scheduled for spring 2013.

B. Land Use Plan Conformance

Land Use Plan (LUP) Name: The current land use plan is the *Glenwood Springs Resource Management Plan* (RMP) (BLM 1984, revised 1988). Relevant amendments include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999).

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

Determination of Conformance: The Proposed Action is in conformance with the 1991 and 1999 RMP amendments cited above because the Federal mineral estate proposed for development was designated as open to oil and gas leasing and development, and Federal oil and gas leases COC62161 and COC62163 were duly issued pursuant thereto. Furthermore, the Proposed Action would occur within the boundaries of the *Wheeler to Webster Geographic Area Plan* (CO140-2001-048). The Proposed Action is therefore in conformance with the current land use plan, as amended.



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Figure 3. Plan of Development

C. Compliance with NEPA

Consistency with CX Category 2: Drilling an oil and gas well at a location or well pad site at which drilling has occurred within five years prior to the date of spudding the well. All of the questions listed in Table 2 must be answered “Yes” to use this Section 390 CX.

Table 2. Project Screening Questions		Yes	No
1.	Does the proposed drilling take place at an existing location and/or well pad site?	<u>Yes</u>	
2.	Has drilling occurred at the existing location and/or well pad site within 5 years prior to the date of spudding the proposed well?	<u>Yes</u>	

Note that the PA 22-21 pad was originally analyzed in the Wheeler to Webster GAP (WWGAP). Although CX Category 2 does not require prior NEPA, the 19 wells proposed in this Section 390 CX analysis would be tracked by the BLM against the air quality model published in October 2011, which addresses potential air quality impacts from oil and gas activities. This tracking is intended to ensure that the number of Federal oil and gas wells modeled for air quality impacts (6,640 wells BLM and National Forest System lands) is not exceeded without subsequent analysis.

Persons and/or Agencies Consulted: WPX Energy: April Mestas, Kris Meil, Adam Tankersley, Wally Hammer

Interdisciplinary Review: BLM staff from the CRVFO listed in Table 3 participated in the preparation of this Section 390 CX, including review of survey results submitted by the Operator’s consultants, evaluation of impacts likely to occur from implementation of the proposed action, and identification of appropriate COAs.

Table 3. BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
John Brogan	Archaeologist	Cultural Resources, Native American Religious Concerns
Jim Byers	Natural Resource Specialist	EA Project Lead, Access & Transportation, Socioeconomics, Wastes-Hazardous or Solid
Allen Crockett.	Supervisory Natural Resource Specialist	Technical Review, NEPA Review
Shauna Kocman.	Petroleum Engineer	Downhole COAs Air Quality, Noise, Soils, Surface Water, Waters of the U.S.
Julie McGrew	Natural Resource Specialist	Visual Resources
Judy Perkins	Botanist	Invasive Non-native Species, Special Status Plants, Vegetation
Sylvia Ringer	Wildlife Biologist	Migratory Birds, Special Status Species Animals, Aquatic and Terrestrial Wildlife
Todd Sieber	Geologist	Geology and Minerals, Groundwater, Paleontology

The Proposed Action was presented to the Colorado River Valley Field Office interdisciplinary team on April 8, 2013. An onsite of the project was conducted on April 10, 2013. The NEPA document was posted on the CRVFO NEPA website on April 12, 2013, for solicitation of public comment.

MITIGATION: Conditions of approval (COA) to be attached to the APDs for the proposed wells on the PA 22-21 pad are listed in Attachment A.

Name of Preparer: Jim Byers, Natural Resource Specialist Date: April 26, 2013

D. Implementation Date

Note: The following condition of approval (COA) must be added to the approved permit.

The approval of this permit was categorically exempt from the requirements of NEPA through Section 390 (b)(2) of the Energy Policy Act of 2005. This subsection specifically states: *Drilling an oil or gas well at a location or well pad site at which drilling has occurred previously within 5 years prior to the date of spudding the well.* If the proposed well is not been spudded by April 10, 2016, this Application for Permit to Drill will expire and the operator is to cease all operations related to preparing to drill the well.

E. Signature

The Proposed Action is statutorily categorically excluded from further NEPA documentation in accordance with Section 390 (b)(2) of the Energy Policy Act of 2005, which provides for such exclusion of: *Drilling an oil or gas well at a location or well pad site at which drilling has occurred previously within 5 years prior to the date of spudding the well.*

Authorizing Official:  Date: April 26, 2013

F. Decision and Rationale for Action

I have decided to approve the drilling of 19 Federal wells from the existing PA 22-21 Pad with the stipulations and Conditions of Approval (COAs) identified in Attachment A of this form. The stipulations and COAs are required by this decision, and variance from these stipulations and COAs during project implementation may require further NEPA review.

I have reviewed Section B, Land Use Plan Conformance, and Section C, Compliance with NEPA, and have determined that the proposed activity is in conformance with the applicable land use plan(s) and referenced NEPA documents. I have also evaluated the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 has been correctly applied. I have determined, that no further environmental analysis is required.

 April 26, 2013
Allen B. Crockett, Ph.D., J.D. Date
Supervisory Natural Resource Specialist

G. Administrative Review or Appeal Opportunities

Applications for Permit to Drill and Sundry Notices

Under BLM regulations addressed in 43 CFR 3165, a decision to approve the Applications for Permit to Drill is subject to appeal and administrative review. An administrative review must be conducted in accordance with 43 CFR 3165.3 and must take place prior to pursuing an appeal to the Interior Board of Land Appeals.

Any adversely affected party may request an administrative review, before the State Director, either with or without oral presentation. Such a request must include information required under 43 CFR 3165.3(b), State Director Review (SDR), including all supporting documentation. Such a request must be filed in writing with the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215 within 20 business days from the date the decision is received or considered to have been received. Upon request and showing of good cause, an extension for submitting supporting/additional data may be granted by the State Director. Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals in accordance with 43 CFR 3165.4.

SURFACE-USE CONDITIONS OF APPROVAL
DOI-BLM-CO-N040-2013-0063-CX (390)
Drill 19 Federal Wells from Existing PA 22-21 Pad

GENERAL COAS

1. Administrative Notification. The operator shall notify the BLM representative at least 48 hours prior to initiation of construction. If requested by the BLM representative, the operator shall schedule a pre-construction meeting, including key operator and contractor personnel, to ensure that any unresolved issues are fully addressed prior to initiation of surface-disturbing activities or placement of production facilities. No construction activities shall commence without staking of pad construction limits, pad corners, and road/pipeline centerlines and disturbance corridors.
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 6 inches. The operator shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement, and dust abatement. When rutting within the traveled way becomes greater than 6 inches, blading and/or gravelling shall be conducted as approved by the BLM.
3. Drill Cuttings Management. Cuttings generated from the numerous planned well bores shall be worked through a shaker system on the drill rig, mixed with a drying agent, if necessary, and deposited in the planned cuttings trench or piled on location against the cut slope for later burial during the interim reclamation earthwork. The cuttings shall be remediated per COGCC regulations (Table 910-1 standards) prior to earthwork reshaping related to well pad interim reclamation.
4. Dust Abatement. The operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events. The BLM may direct the operator to change the level and type of treatment (watering or application of various dust agents, surfactants, and road surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust.
5. Drainage Crossings and Culverts. Construction activities at perennial, intermittent, and ephemeral drainage crossings (e.g. burying pipelines, installing culverts) shall be timed to avoid high flow conditions. Construction that disturbs any flowing stream shall utilize either a piped stream diversion or a cofferdam and pump to divert flow around the disturbed area.

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 (USACE) recommends designing drainage crossings for the 100-year event. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17.

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.

6. Jurisdictional Waters of the U.S. The operator shall obtain appropriate permits from the U.S. Army Corps of Engineers (USACE) prior to discharging fill material into Waters of the U.S. in accordance with Section 404 of the Clean Water Act. Waters of the U.S. are defined in 33 CFR Section 328.3 and may include wetlands as well as perennial, intermittent, and ephemeral streams. Permanent impacts to Waters of the U.S. may require mitigation. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17. Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.
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 reclamation are described below.
 - a. Reclamation Plans. In areas that have low reclamation potential or are especially challenging to restore, reclamation plans will be required prior to APD approval. The plan shall contain the following components: detailed reclamation plans, which include contours and indicate irregular rather than smooth contours as appropriate for visual and ecological benefit; timeline for drilling completion, interim reclamation earthwork, and seeding; soil test results and/or a soil profile description; amendments to be used; soil treatment techniques such as roughening, pocking, and terracing; erosion control techniques such as hydromulch, blankets/matting, and wattles; and visual mitigations if in a sensitive VRM area.
 - b. Deadline for Interim Reclamation Earthwork and Seeding. Interim reclamation to reduce a well pad to the maximum size needed for production, including earthwork and seeding of the interim reclaimed areas, shall be completed within 6 months following completion of the last well planned to be drilled on that pad as part of a continuous operation. If a period of greater than one year is expected to occur between drilling episodes, BLM may require implementation of all or part of the interim reclamation program.

Reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, and of topsoil piles and berms, shall be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 shall be seeded during the remainder of the early winter season instead of during the following spring, unless BLM approves otherwise based on weather. If road or pipeline construction occurs discontinuously (e.g., new segments installed as new pads are built) or continuously but with a total duration greater than 30 days, reclamation, including seeding, shall be phased such that no portion of the temporarily disturbed area remains in an unreclaimed condition for longer than 30 days. BLM may authorize deviation from this requirement based on the season and the amount of work remaining on the entirety of the road or pipeline when the 30-day period has expired.

If requested by the project lead NRS for a specific pad or group of pads, the operator shall contact the NRS by telephone or email approximately 72 hours before reclamation and reseeding begin. This will allow the NRS to schedule a pre-reclamation field visit if needed to ensure that all parties are in agreement and provide time for adjustments to the plan before work is initiated.

The deadlines for seeding described above are subject to extension upon approval of the BLM based on season, timing limitations, or other constraints on a case-by-case basis. If the BLM approves an extension for seeding, the operator may be required to stabilize the reclaimed surfaces using hydromulch, erosion matting, or other method until seeding is implemented.

- c. Topsoil Stripping, Storage, and Replacement. All topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. In areas of thin soil, a minimum of the upper 6 inches of surficial material shall be stripped. The BLM may specify a stripping depth during the onsite visit or based on subsequent information regarding soil thickness and suitability. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation. The BLM best management practice (BMP) for the Windrowing of Topsoil (COA #17) shall be implemented for well pad construction whenever topography allows.
- d. Seedbed Preparation. For cut-and-fill slopes, initial seedbed preparation shall consist of backfilling and recontouring to achieve the configuration specified in the reclamation plan. For compacted areas, initial seedbed preparation shall include ripping to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces shall be covered evenly with topsoil.

Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than 1 day prior to seeding to break up any crust that has formed.

If directed by the BLM, the operator shall implement measures following seedbed preparation (when broadcast-seeding or hydroseeding is to be used) to create small depressions to enhance capture of moisture and establishment of seeded species. Depressions shall be no deeper than 1 to 2 inches and shall not result in piles or mounds of displaced soil. Excavated depressions shall not be used unless approved by the BLM for the purpose of erosion control on slopes. Where excavated depressions are approved by the BLM, the excavated soil shall be placed only on the downslope side of the depression.

If directed by the BLM, the operator shall conduct soil testing prior to reseeding to identify if and what type of soil amendments may be required to enhance revegetation success. At a minimum, the soil tests shall include texture, pH, organic matter, sodium adsorption ratio (SAR), cation exchange capacity (CEC), alkalinity/salinity, and basic nutrients (nitrogen, phosphorus, potassium [NPK]). Depending on the outcome of the soil testing, the BLM may require the operator to submit a plan for soil amendment. Any requests to use soil amendments not directed by the BLM shall be submitted to the CRVFO for approval.

- e. Seed Mixes. A seed mix consistent with BLM standards in terms of species and seeding rate for the specific habitat type shall be used on all BLM lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated October 23, 2012).

For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. The seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed may contain up to 2.0 percent of "other crop" seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. Seed tags or other official documentation shall be submitted to BLM at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

- f. Seeding Procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation.

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover or by hydroseeding and hydromulching. Hydroseeding and hydromulching shall be conducted in two separate applications to ensure adequate contact of seeds with the soil.

If interim revegetation is unsuccessful, the operator shall implement subsequent reseedings until interim reclamation standards are met.

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil.

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

- h. Erosion Control. Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other measures approved by the BLM. Cut-and-fill slopes along drainages or in areas with high erosion potential shall also be protected from erosion using hydromulch designed specifically for erosion control or biodegradable blankets/matting, bales, or wattles of weed-free straw or weed-free native grass hay. A well-anchored fabric silt fence shall also be placed at the toe of cut-and-fill slopes along drainages or to protect other sensitive areas from deposition of soils eroded off the slopes. Additional BMPs shall be employed as necessary to reduce soil erosion and offsite transport of sediments.
- i. Site Protection. The pad shall be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species are firmly established, whichever comes later. The seeded species will be considered firmly established when at least 50 percent of the new plants are producing seed. The BLM will approve the type of fencing.
- j. Monitoring. The operator shall conduct annual monitoring surveys of all sites categorized as “operator reclamation in progress” and shall submit an annual monitoring report of these sites to the BLM by **December 31** of each year. The monitoring program shall use the four Reclamation Categories defined in Appendix I of the 1998 DSEIS to assess progress toward reclamation objectives. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the report shall identify appropriate corrective actions. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the BLM.
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 Field Office *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports and Pesticide Application Records (PARs) shall be submitted to BLM by **December 1**.

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 through April 30 annually.**
10. Bald and Golden Eagles. It shall be the responsibility of the operator to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, shall be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative to the BLM Field Office (970-876-9051).
11. Raptor Nesting. To protect nesting raptors, a survey shall be conducted prior to construction, drilling, or completion activities that are to begin during the raptor nesting season (February 1 to August 15). The survey shall include all potential nesting habitat within 0.25 mile of a well pad or 0.125 mile of an access road, pipeline, or other surface facility. Results of the survey shall be submitted to the BLM. If a raptor nest is located within the buffer widths specified above, a 60-day raptor nesting TL will be applied by the BLM to preclude initiation of construction, drilling, and completion activities during a period applicable to the particular species (**March 1 to April 30 or May 1 to June 30**). The operator is responsible for complying with the MBTA, which prohibits the “take” of birds or of active nests (those containing eggs or young), including nest failure caused by human activity (see COA for Migratory Birds).
12. Migratory Birds – Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all vegetation removal or surface disturbance in previously undisturbed lands providing potential nesting habitat for Birds of Conservation Concern (BCC) is prohibited from **May 1 to June 30**. An exception to this TL may be granted if nesting surveys conducted no more than one week prior to surface-disturbing activities indicate that no BCC species are nesting within 30 meters (100 feet) of the area to be disturbed. Nesting shall be deemed to be occurring if a territorial (singing) male is present within the distance specified above. Nesting surveys shall include an aural survey for diagnostic vocalizations in conjunction with a visual survey for adults and nests. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 AM under favorable conditions for detecting and identifying a BCC species. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 1 and continue into the 60-day period at the same location.
13. Migratory Birds – General. 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, which includes injury and direct mortality resulting from human actions not intended to have such result. To minimize the potential for the take of a migratory bird, the operator shall take reasonable steps to prevent use by birds of fluid-containing pits associated with oil or gas operations, including but not limited to reserve pits, produced-water pits, hydraulic fracturing flowback pits, evaporation pits, and cuttings trenches. Liquids in these pits—whether placed or accumulating from precipitation—may pose a risk to birds as a result of ingestion, absorption through the skin, or interference with buoyancy and temperature regulation.

Based on low effectiveness of brightly colored flagging or spheres suspended over a pit, the operator shall install netting with a mesh size of 1 to 1.5 inches, and suspended at least 4 feet above the fluid surface, on all pits into which fluids are placed, except for storage of fresh water in a pit that contains no other material. The netting shall be installed within 24 hours of placement of fluids into a pit. The requirement for netting does not apply to pits during periods of continuous, intensive human activity at the pad, such as drilling and hydraulic fracturing phases or, as pertains to cuttings trenches, during periods of active manipulation for cuttings management, remediation of contaminated materials, or other purposes.

14. Fossil 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 of the findings. The discovery must be protected until notified to proceed by the BLM.

Where feasible, the operator shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM of any finds. The BLM would, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the operator shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

15. Cultural Education/Discovery. All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons would be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the BLM 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 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 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. Approval to proceed would be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM 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 would inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder would likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)

- the timeframe for the BLM 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 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 would provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator would be allowed to resume construction.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the Proposed Action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361).

16. Visual Resources. 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 BLM due to other resource concerns—and shall be placed to maximize reshaping of cut-and-fill slopes and interim reclamation of the pad.

All woody vegetation (live and dead) shall remain standing at the toe of the fill slopes to provide visual screening. All woody vegetation left standing at the toe of the fill slopes shall be protected and remain standing and undamaged when fill material is pulled back to recontour the well pad.

Above-ground facilities shall be painted **Shale Green** to minimize contrast with existing surrounding vegetation or rock outcrops.

To the extent practicable, cut and fill slopes shall not exceed 2:1 to provide stability and to facilitate vegetation establishment.

During construction, the BLM and WPX representatives shall jointly review construction measures to determine effectiveness in meeting visual resource mitigation measures, and if subtle changes in construction techniques are warranted, they could be directed by the BLM Authorized Officer.

17. Windrowing of Topsoil. Topsoil shall be windrowed around the pad perimeter to create a berm that limits and redirects stormwater runoff and extends the viability of the topsoil per BLM Topsoil Best Management Practices (BLM 2009 PowerPoint presentation available upon request from Glenwood Springs Field Office). Topsoil shall also be windrowed, segregated, and stored along pipelines and roads for later spreading across the disturbed corridor during final reclamation. Topsoil berms shall be promptly seeded to maintain soil microbial activity, reduce erosion, and minimize weed establishment.

18. Interim Reclamation Related to Drilling Phases. Within 1 year of completion of all exploratory wells proposed on a pad or within one year of completion of all development wells on a pad (whichever the situation may be), the operator would stabilize the disturbed area by recontouring, mulching, providing run-off and erosion control, replacing topsoil as directed, and seeding with BLM-prescribed native seed mixes (or landowner requested seed mix on Fee surface), and conducting weed control, as necessary. In cases where the exploratory drilling and development drilling on a single pad occur more than 1 year apart, slopes shall be recontoured to the extent necessary to accommodate seeding, and seed mixes required by BLM or requested by the private landowner shall be applied to stabilize the soil between visits per direction of the BLM.

SITE-SPECIFIC COAS FOR THE PA 22-21 PAD, ROAD, AND PIPELINE

1. Expiration Date of Application for Permit to Drill. If the proposed well has not been spudded by **April 10, 2016**, this Application for Permit to Drill will expire and the operator is to cease all operations related to preparing to drill the well.
2. Cuttings Management. Drill cuttings generated from the 19 new Federal wells shall be hauled to the existing Cottonwood Cuttings Trench as described in the APD. The reclamation of the Cottonwood Cuttings Trench shall occur after the drill cuttings from the PA 22-21 wells and the drill cuttings from the AP 21-20-695 fee wells are deposited at this location. Final reclamation measures for the Cottonwood Cuttings Trench shall adhere to the reclamation COAs provided herein and any additional requirements provided by the BLM Authorized Officer.
3. Production Equipment Details. To the extent possible given the existing buried flowlines serving the producing wells on the PA 22-21 pad, the new separators shall be repositioned and installed in a manner that provides suitable space west of the production units to allow the pad cutslope to be laid back to 2:1 slope and reclaimed and also to allow the northwest corner of the pad to be re-sloped and reclaimed.

The existing separators may remain in their present position, but during the earthwork for the interim reclamation of the pad, the steep cutbank west of the units shall be laid back and reclaimed to the satisfaction of the Authorized Officer.

The storage tanks planned for the pad shall be repositioned so there is no more than 100- foot separation between the existing well heads and the tank battery thereby also allowing space north of the tank battery to reshape and reclaim the pad cutslope.

BUREAU OF LAND MANAGEMENT

Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652

DOWNHOLE CONDITIONS OF APPROVAL Applications for Permit to Drill

Operator: WPX Energy Rocky Mountain LLC
Lease Numbers: COC62161 & COC62163
Pad: PA 22-21
Surface Location: Garfield County; SENW, Sec. 21 T6S R95W
Engineer: Shauna Kocman

See list of wells following the COAs.

1. Twenty-four hours *prior* to (a) spudding, (b) conducting BOPE tests, (c) cementing/running casing strings, and (d) within 24 hours *after* spudding, the CRVFO shall be notified. One of the following CRVFO inspectors shall be notified by phone. The contact number for all notifications is: 970-876-9064. The BLM CRVFO inspectors are Julie King, Lead PET; David Giboo, PET; Greg Rios, PET; Tim Barrett, PET; Alex Provstgaard, PET; Brandon Jamison, PET.
2. A CRVFO 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, sidetracks, changes or variances to the BOPE, deviating from conditions of approval, and conducting other operations not specified within the APD. Contact Shauna Kocman or Peter Cowan for verbal approvals (contact information below).
3. If a well control issue or failed test (e.g. kick, blowout, water flow, casing failure, or a bradenhead pressure increase) arises during drilling or completions operations, Shauna Kocman or Peter Cowan shall be notified within 24 hours from the time of the event. IADC/Driller's Logs and Pason Logs (mud logs) shall be forwarded to CRVFO – Petroleum Engineer, 2300 River Frontage Road, Silt, CO 81652 within 24 hours of a well control event.
4. The BOPE shall be tested and conform to Onshore Order No. 2 for a **3M** system and recorded in the IADC/Driller's log. A casing head rated to 3,000 psi or greater shall be utilized.
5. Flexible choke lines shall meet or exceed the API SPEC 16C requirements. Flexible choke lines shall be effectively anchored, have flanged connections, and configured to the manufacturer's specifications. Manufacturer specifications shall be kept with the drilling rig at all times and immediately supplied to the authorized officer/inspector upon request. Specifications at a minimum shall include acceptable bend radius, heat range, anchoring, and the working pressure. All flexible choke lines shall be free of gouges, deformations, and as straight/short as possible.
6. An electrical/mechanical mud monitoring equipment shall be function tested prior to drilling out the surface casing shoe. As a minimum, this equipment shall include a pit volume totalizer, stroke counter, and flow sensor.
7. Prior to drilling out the surface casing shoe, gas detecting equipment shall be installed in the mud return system. The mud system shall be monitored for hydrocarbon gas/pore pressure changes, rate

of penetration, and fluid loss.

8. A gas buster shall be functional and all flare lines effectively anchored in place, prior to drilling out the surface casing shoe. The discharge of the flare lines shall be a minimum of 100 feet from the wellhead 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. After the surface/intermediate casing is cemented, a Pressure Integrity Test/Mud Equivalency Test/FIT shall be performed on the first well drilled in accordance with OOGO No. 2; Sec. III, B.1.i. to ensure that the surface/intermediate casing is set in a competent formation. This is not a Leak-off Test, but a formation competency test, insuring the formation at the shoe is tested to the highest anticipated mud weight equivalent necessary to control the formation pressure to the next casing shoe depth or TD. Submit the results from the test via email (skocman@blm.gov) on the first well drilled on the pad or any horizontal well and record results in the IADC log. Report failed test to Shauna Kocman or Peter Cowan. A failed pressure integrity test is more than 10% pressure bleed off in 15 minutes.
10. As a minimum, cement shall be brought to 200 feet above the Mesaverde. After WOC for the production casing, a CBL shall be run to verify the TOC and an electronic copy in .las and .pdf format shall be submitted to CRVFO – Petroleum Engineer, 2300 River Frontage Road, Silt, CO 81652 within 48 hours. If the TOC is lower than required or the cement sheath of poor quality, a CRVFO petroleum engineer shall be notified for remedial operations within 48 hours from running the CBL and prior to commencing fracturing operations,

A greater volume of cement may be required to meet the 200-foot cement coverage requirement for the Williams Fork Formation /Mesaverde Group. Evaluate the top of cement on the first cement job on the pad (Temperature Log). If cement is below 200-foot cement coverage requirement, adjust cement volume to compensate for low TOC/cement coverage.
11. On the first well drilled on this pad, a triple combo open-hole log shall be run from the base of the surface borehole to surface and from TD to bottom of surface casing shoe. This log shall be in submitted within 48 hours in .las and .pdf format to: CRVFO – Todd Sieber, 2300 River Frontage Road, Silt, CO 81652. Contact Todd Sieber at 970-876-9000 or asieber@blm.gov for clarification.
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) Pressure Integrity Test results within 30 days of completed operations (i.e. landing tubing) per 43 CFR 3160-9 (a).
13. Prior to commencing fracturing operations, the production casing shall be tested to the maximum anticipated surface treating/fracture pressure and held for 15 minutes without a 2% leak-off. If leak-off is found, Shauna Kocman or Peter Cowan 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.
14. During hydraulic frac operations, monitor the bradenhead/casing head pressures throughout the frac job. Frac operations shall be terminated upon any sharp rise in annular pressure (+/- 40 psi or greater)

in order to determine well/wellbore integrity. Notify Shauna Kocman or Peter Cowan immediately.

15. Per 43 CFR 3162.4-1(c), no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in a case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed.

Contact Information:

Shauna Kocman, PhD, PE
Petroleum/ Environmental Engineer

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Peter Cowan
Petroleum Engineer

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List of Wells				
<i>Proposed Pad</i>	<i>Proposed Wells</i>	<i>Surface Locations</i>	<i>Bottomhole Locations</i>	<i>Lease</i>
PA 22-21 (BLM Surface)	PA 24-16	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 16 SESW	COC62163
	PA 31-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NWNE	COC62161
	PA 41-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NENE	COC62161
	PA 42-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SENE	COC62161
	PA 43-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NESE	COC62161
	PA 324-16	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 16 SESW	COC62163
	PA 331-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NWNE	COC62161
	PA 341-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NENE	COC62161
	PA 342-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SENE	COC62161
	PA 424-16	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 16 SESW	COC62163
	PA 431-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NWNE	COC62161
	PA 432-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SWNE	COC62161
	PA 441-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NENE	COC62161
	PA 442-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SENE	COC62161
	PA 524-16	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 16 SESW	COC62163
	PA 531-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NWNE	COC62161
	PA 532-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SWNE	COC62161
	PA 541-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 NENE	COC62161
PA 542-21	T6S R95W, Sect. 21 SENW	T6S R95W, Sect. 21 SENE	COC62161	