

**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. 1**

NEPA LOG NUMBER: DOI-BLM-CO-N040-2014-0103-CX (390)

### **A. Background**

Bureau of Land Management (BLM) Office: Colorado River Valley Field Office

CASEFILE/PROJECT NUMBER: COC27743 and COC62163 (bottomholes) for Federal oil and gas leases, COC76745 (Site Right-of-Way authorizing fee wells and ancillary developments), and COC76745-01 (8-inch-Natural Gas Pipeline).

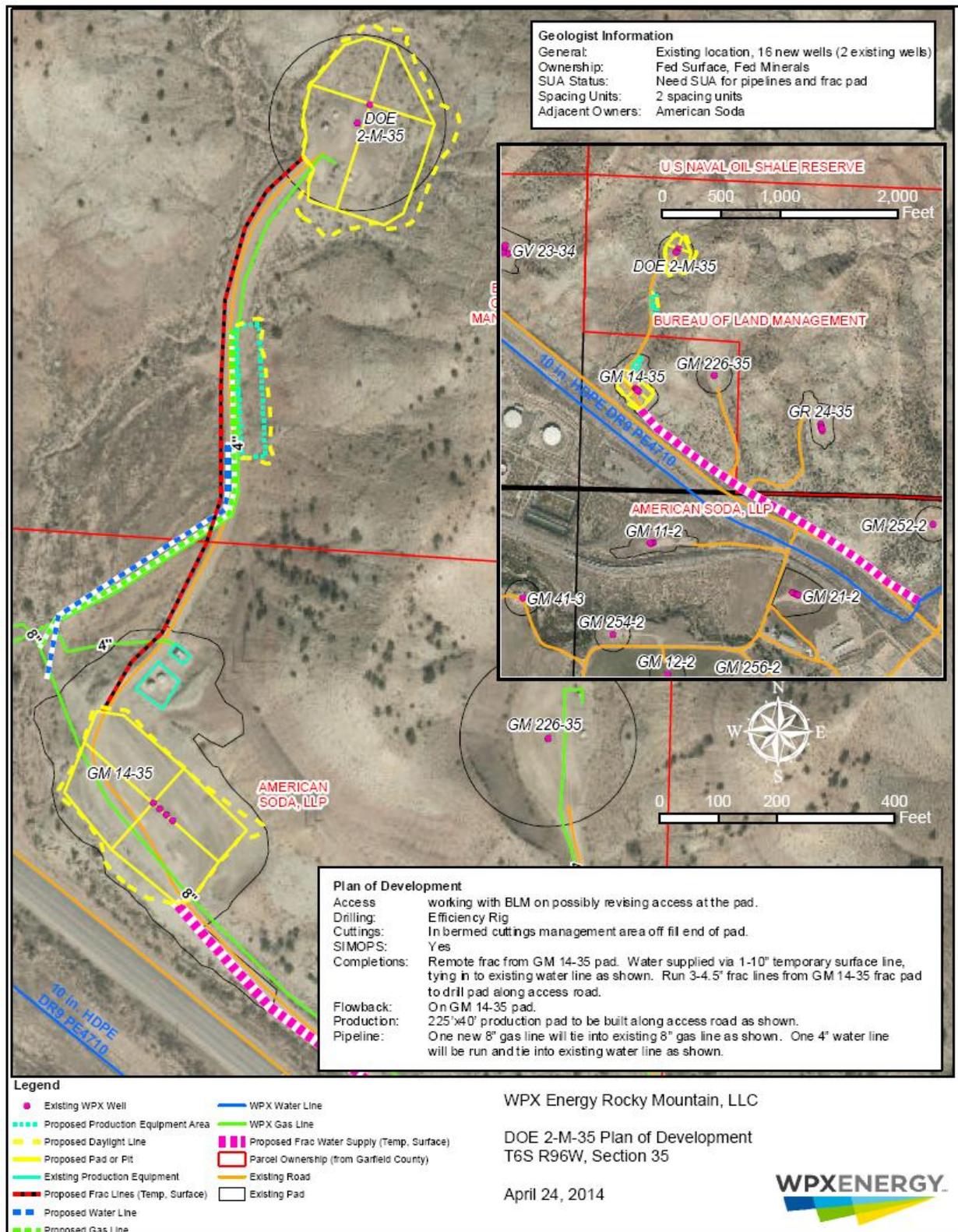
PROPOSED ACTION TITLE/TYPE: Proposal to Drill 10 Federal Wells and 2 Fee Wells from the Existing, Expanded DOE 2-M-35 Pad Located on BLM Land Northwest of Parachute, Authorized by Applications for Permit to Drill (Federal Wells) and Right-of-Way Grant (Fee Wells).

LOCATION OF THE PROPOSED ACTION: Township 6 South (T6S), Range 96 West (R96W), Section 35, Lot 12, Sixth Principal Meridian. The project area is located 3 air-miles northwest of Parachute, Garfield County, Colorado (Figure 1). The elevation of the project area is approximately 5,445 feet.

DESCRIPTION OF THE PROPOSED ACTION: The existing DOE 2-M-35 well pad, which currently supports two producing Federal oil and gas wells, has been in a state of interim reclamation since the last drilling visit pad in 1997. Located entirely on BLM land, the pad was initially constructed in 1995 with the drilling of the DOE 2-M-35 well. A second well was drilled, completed, and produced during the 1997 visit.

The pad lies about 0.25 mile north of Garfield County Road (CR) 215 and across from the Solvay sodium bicarbonate processing plant (Figure 2). The pad is served by a gated access road crossing private land. The pad was constructed with a sizable fillslope and a long road approach that enters the pad at the highest point of the fill. A soil slump occurred within the cutslope since the 1995 pad construction as determined with aerial photo review. The proposed pad reconstruction would be designed to avoid the slump area at the northeast pad corner.

The DOE 2-M-35 project would involve reconstructing the pad within the 1995 disturbance footprint and drilling 10 new Federal directional wells (authorized by Application for Permit to Drill (APD)) and two fee directional wells (authorized by BLM Right-of-Way (ROW)) in order to develop the Williams Fork formation. The production equipment serving these wells would be staged offsite along the access road south of the pad. Cuttings developed during the wellbore drilling would be stored at the base of the pad fillslope. A new 8-inch gas gathering line would be buried from the separators south to a connection point near CR 215. Produced water would be piped in a new 4-inch buried water line into WPX's operating water collection system and on to its treatment facility for recycling (Figure 1).



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**Figure 1. DOE 2-M-35 Plan of Development including Vicinity Inset**

As recommended by WPX's geotechnical engineer, the pad would be reconstructed in fall 2014 to allow the new disturbance to withstand the rigors of winter weather and assess if the reconfigured cutslope will maintain stability at the northeast pad corner. Well drilling would be scheduled for late spring-summer 2015.

The DOE 2-M-35 pad would be built with an atypical configuration primarily to avoid the nearby drainage and minimize disturbance to the adjacent slump block (Figure 3). The estimated earthwork would involve cuts less than 15 feet with the exception of the 25.6-foot cut at the northeast corner. The pad would be designed with 1:1 (horizontal:vertical) cutslopes and 1.5:1 fillslopes. The south edge of the pad would contain nearly all of the generated fill material from the reconstruction yielding fillslopes approaching 12 feet. The project would generate an estimated 5,900 cubic yards of excess material, which would be used to extend the pad fillslope and to establish an earthen berm alongside the realigned drainage south of the pad. Topsoil would be stripped and stockpiled above the pad near the north-side drainage and below the pad to help contain cuttings and redirect the south-side drainage.

A closed-loop drilling system would be used on the pad, eliminating the need for a fluids-containing reserve pit. Recovered drilling fluid would be stored on location in steel tanks for reuse. Drill cuttings would be collected from the rig's shaker system and would be temporarily placed within a bermed area between the road, pad fillslope and the redirected drainage south of the pad. After the drilling is finished, the cuttings would be tested to ensure compliance with COGCC standards, moved back to the base of the cutslope at the northeast pad corner, and buried during the earthwork stage of interim reclamation. The drilling plan includes the use of a self-contained flare unit to restrict venting.

Well completions would occur simultaneously while the drilling is ongoing with the nearby GM 14-35 pad providing the area to support the remote frac. Equipment and water storage would occur on the re-bladed pad resulting in 2.10 acres of surface disturbance for the GM 14-35 pad. Water needed for hydraulic fracturing ("frac") operations would be delivered to the GM 14-35 pad via one 10-inch poly surface water line and then delivered to the wells on the DOE 2-M-35 pad through three 4½-inch diameter steel surface lines laid along the road edge.

The existing access road serving both pads is sufficient to handle the truck traffic related to the planned operations for this project although the road approach to the DOE 2-M-35 pad would be reduced in grade by 5 feet to improve vehicle safety and the visual appearance of the project from CR 215. Production facilities would be staged south of the pad along the road in a new footprint established for separators and storage tanks (Figure 2).

About 710 feet of buried 8-inch diameter welded steel gas pipeline would be trenched from the separators within the existing gas line corridor (40-foot disturbance width) to be connected to the existing gas market line near CR 215 on private land (Figure 2). The 4-inch water line would be installed in the same gas line trench. WPX's existing water line system and water treatment facilities allow WPX to drastically reduce and limit its use of water truck transports for the collection of production water from the wells or the delivery of treated water for the frac operations. Oil truck transports would periodically haul condensate developed from the wells and stored in the tanks at the new tank setting to offsite processing facilities.

The DOE 2-M-35 project would include the following components:

- (1) Redisturbing the existing DOE 2-M-35 pad to a 2.01-acre disturbance footprint to provide working space for drilling, completion and well production operations and to provide storage space for drill cuttings.
- (2) Establishing a new production equipment pad along the access road disturbing 0.26 acre.

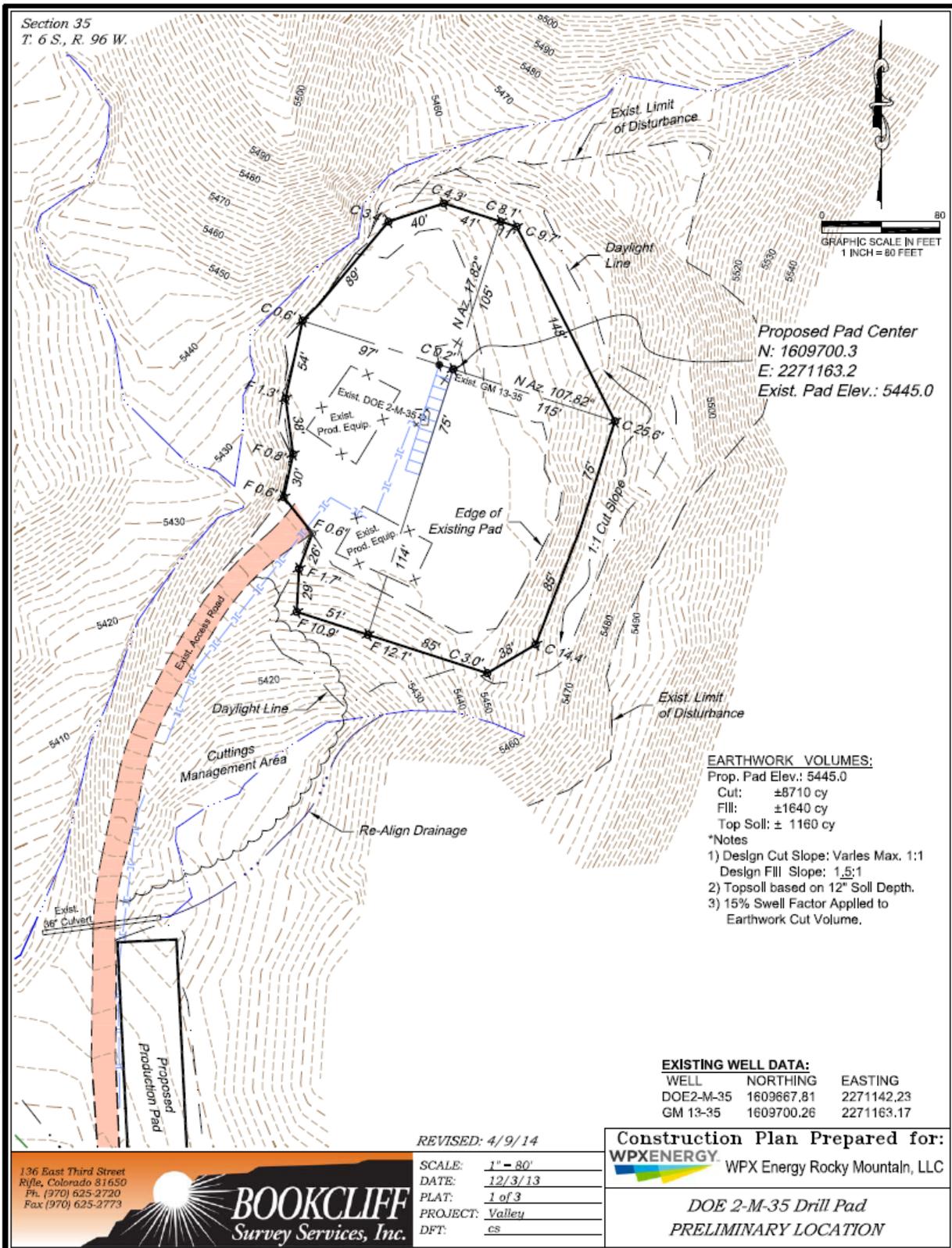


Figure 2. DOE 2-M-35 Construction Layout.

- (3) Realigning the south-side drainage to provide suitable space for drill cuttings storage at the base of the DOE 2-M-35 fillslope.
- (4) Drilling 10 Federal wells directionally into the nearby Federal lease and 2 wells into fee lease.
- (5) Conducting simultaneous operations (“simops”) with completion operations on the fee GM 14-35 pad during the drilling process, involving 2.40 acres of surface disturbance.
- (6) Burying a new 8-inch welded steel gas pipeline and 4-inch produced water line for approximately 710 feet creating 0.41 acre of disturbance.
- (7) Laying a 10-inch poly surface line alongside the access road to deliver recycled water for well completions and laying three 4½-inch steel frac lines between the two pads for frac operations.
- (8) Reclaiming (interim) the DOE 2-M-35 pad to a working area footprint of 0.58 acre and establishing desirable vegetative cover on the reshaped pad.
- (9) Reclaiming (interim) the GM 14-35 frac pad to a working area footprint of 1.68 acres and establishing desirable vegetative cover on the reshaped pad.

The project would involve 5.49 acres of interim surface disturbance and create 2.52 acres of long-term disturbance (Table 1). Nearly half of the interim disturbance (2.68 acres) would occur on BLM, with 2.81 acres occurring on adjacent private land for the pipeline connections and use of the GM 14-35 frac pad for remote well completions. After interim reclamation, long-term disturbance would be reduced to 0.84 acre on BLM and 1.68 acres on private land. Of the total 5.49 acres of disturbance, only 0.98 acre would be attributed to new surface disturbance on BLM land.

<i>New Disturbance</i>	<i>Private</i>		<i>BLM</i>		<i>Total</i>	
	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>
DOE 2-M-35 Pad	--	--	0.31	0.00	0.31	0.00
DOE 2-M-35 Equip Pad	--	--	0.26	0.26	0.26	0.26
GM 14-35 Frac Pad	0.38	0.00	--	--	0.38	0.00
Gas/Water Pipelines	0.41	0.00	0.41	0.00	0.82 <sup>1</sup>	0.00
<i>Existing Disturbance</i>	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>
DOE 2-M-35 Pad	--	--	0.76	0.50	0.76	0.50
GM 14-35 Frac Pad	1.68	1.68	--	--	1.68	1.68
<i>Redisturbance</i>	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>	<i>Initial</i>	<i>Long-Term</i>
DOE 2-M-35 Pad	--	--	0.94	0.08	0.94	0.08
GM 14-35 Frac Pad	0.34	0.00	--	--	0.34	0.00
<b>TOTAL DISTURBANCE</b>	2.81	1.68	2.68	0.84	5.49	2.52

<sup>1</sup>Buried pipeline right-of-way includes total length of 718 feet with 50-foot wide disturbance corridor.

The Proposed Action would include well drilling and well completion, production of natural gas and associated liquid condensate, proper handling and disposal of produced water, and interim and final reclamation.

Construction of the pad and pipeline spur would follow the guidelines established in the BLM Gold Book, *Surface Operating Standards for Oil and Gas Exploration and Development* (USDI and USDA 2007). The existing pad access road would be graveled prior to drilling to ensure all-weather accessibility to the

pad site. A road maintenance program would be required during the production phase of the well. This program would include, but not be 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.

The Proposed Action would be implemented consistent with the Federal oil and gas lease, Federal regulations (43 CFR 3100), and the operational measures included in the Applications for Permit to Drill (APDs) for the Federal wells and Rights-of-Way for the two fee wells. Appendix A lists the specific Surface Use Conditions of Approval (COAs) to be implemented as mitigation measures for this project. The operator would be responsible for continuous inspection and maintenance of the access roads, pads, and pipelines.

WestWater Engineering conducted a biological survey on May 3-4, 2014, and a follow-up botany survey with USFWS on May 30, 2014. These surveys identified one area of suitable habitat for the Federally threatened plant species, DeBeque phacelia, located 8.55 meters from the edge of disturbance for the well pad. In addition, three areas of marginally suitable habitat were identified at distances of 45, 48, and 82 meters from the edge of disturbance for the well pad and associated pipeline. No DeBeque phacelia plants were found at any of these four sites (WWE 2014a, WWE 2014b). However, 2014 was not a dependable year for emergence of this ephemeral annual species at known locations, so presence or absence could not be determined. Section 7 consultation with USFWS was conducted based on the assumption of potential occupation of the identified suitable and marginally suitable habitat sites (WWE 2014c). USFWS concurred with the BLM determination of “May Affect, Not Likely to Adversely Affect” DeBeque Phacelia (USFWS 2014). This concurrence is contingent on implementation of protective mitigations identified in the Conditions of Approval, including erosion control, temporary fencing, restriction of construction to time periods outside of the DeBeque phacelia growing season, dust abatement limited to water only, and restrictions on herbicide use (Appendix A). No other Federally listed or BLM sensitive plant species were found within 100 meters of the disturbance area, so the project would have no effect on any other special status plant species.

The directional wells would be drilled into nearby Federal lease COC27743 which does not include a big game winter timing limitation. Therefore, a 60-day Condition of Approval, allowed under Federal regulation 43 CFR 3101.1-2, would be included on the Application for Permit to Drill (APD) restricting any construction, drilling or completion work from January 1 through March 1.

## **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 lease COC27743 was duly leased pursuant to the 1999 RMP amendment. The proposed project is of a type specifically contemplated and analyzed in the 1999 RMP amendment and that it is in conformance because

the stipulations specified in the 1999 RMP amendment were attached to the lease and incorporated into the project design. The Proposed Action is therefore in conformance with the current land use plan, as amended.

**C. Compliance with NEPA**

Consistency with CX Category #1: *Individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.* All questions listed in Table 2 must be answered “Yes” to use this Section 390 CX.

NEPA Document Name: The 2005 Wheeler Gulch to Webster Mesa Geographic Area Plan (EA #CO140-2005-0047, approved on May 24, 2005) identified the existing well pads, roads and various pipeline connections serving the affected pads. That EA satisfies the criteria of being an activity-level or project-level EIS or EA that is applicable to the Proposed Action.

<b>Table 2. Project Screening Questions</b>		<b>Yes</b>	<b>No</b>
1.	Would the proposed action disturb less than 5 acres?	<u>Yes</u>	
2.	Is the current amount of surface disturbance on the entire leasehold, plus the proposed action, less than 150 acres? (See Figure 3)	<u>Yes</u>	
3.	Was the proposed action adequately analyzed in an existing site-specific National Environmental Policy Act (NEPA) document?	<u>Yes</u>	

Persons and/or Agencies Consulted: WPX: April Mestas, Kris Meil, Mike Shoemaker, Mike Reynolds, Wally Hammer, Wayne Gallahan, Huddlesworth-Berry Engineering & Testing, LLC - Mike Berry (geotechnical review)

Interdisciplinary Review: BLM staff from the CRVFO listed in Table 3 participated in the preparation of this Section 390 CX, including review of resource 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. The Proposed Action was presented to the CRVFO team on September 16, 2014.

<b>Table 3. BLM Interdisciplinary Team Authors and Reviewers</b>		
<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, Air Quality, Noise, Soils, Surface Water, Waters of the U.S.
Allen Crockett, Ph.D., J.D.	Supervisory NRS	NEPA Review
Bob Hartman	Petroleum Engineer	Downhole COAs and Drilling Plan Review
Julie McGrew	Realty Specialist	Visual Resources, Realty
Judy Perkins, Ph.D.	Botanist	Invasive Non-native Species, Special-status Species (Plants), Vegetation
Sylvia Ringer	Wildlife Biologist	Migratory Birds, Special-status Species (Animals), Wildlife, Aquatic and Terrestrial

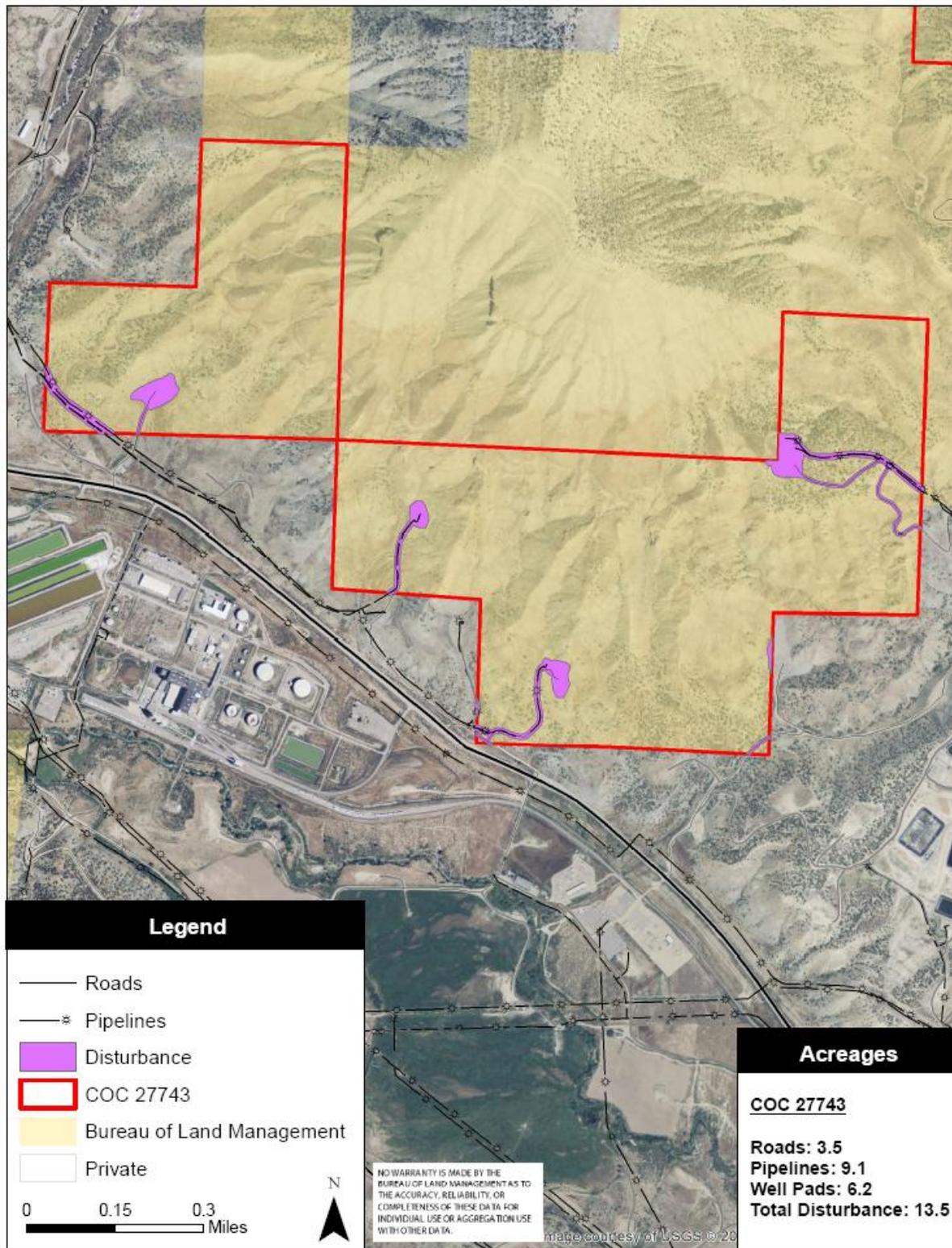


Figure 3. Disturbance Acreage for Federal Lease COC27743

**MITIGATION:** Conditions of Approval (COAs) to be attached to the APDs and ROWs for the 12 Wells Drilled on the Existing DOE 2-M-35 Pad are listed in this Section 390 CX.

Name of Preparers: Jim Byers, Natural Resource Specialist Date Prepared: September 16, 2014

**REFERENCES CITED:**

U.S. Department of the Interior and U.S. Department of Agriculture (USDI and USDA). 2007. Surface operating standards and guidelines for oil and gas exploration and development. The Gold Book.

U.S. Fish and Wildlife Service (USFWS). 2014. Letter of Concurrence. Grand Junction, CO.

WestWater Engineering (WWE). 2014a. WPX Energy, DOE 2-M-35, Biological Survey Report. Grand Junction, CO.

\_\_\_\_\_. 2014b. WPX Energy, DOE 2-M-35, Biological Survey Report - Addendum. Grand Junction, CO.

\_\_\_\_\_. 2014c. Biological Assessment, WPX Energy DOE 2-M-35 Well Pad Expansion, Auxiliary Pads, and Associated Pipelines, Garfield County, Colorado. Grand Junction, CO.

**D. Signature**

The Proposed Action is statutorily categorically excluded from further NEPA documentation in accordance with Section 390 (b)(1) of the Energy Policy Act of 2005, which provides for such exclusion of individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed. Acres of surface disturbance on Federal lease COC27743 are shown on Figure 3.

Authorizing Official: Allen B. Crockett Date: 10/24/14

**E. Decision and Rationale for Action**

I have decided to approve the BLM APDs to drill and develop the 10 Federal wells and approve the BLM ROWs to drill and develop the 2 fee wells from the existing DOE 2-M-35 Pad with the attached Conditions of Approval (COAs). The COAs are required by this decision, and variance from these COAs during project implementation may require further NEPA review. I have reviewed Section C, Land Use Plan Conformance and 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 and that no further environmental analysis is required.

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

10/24/14  
Date

## **F. Administrative Review or Appeal Opportunities**

### Applications for Permit to Drill and Sundry Notices

Under BLM regulations addressed in 43 CFR 3165, the decision to approve the Application 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 Director, 2850 Youngfield Street, Lakewood, CO 80215* within 20 business days of 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.

### Rights-of-Way or Temporary Use Permits

The decision to authorize the Rights-of-Way for the two fee wells may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, part 4. If an appeal is taken, the notice of appeal must be filed in this office (*Colorado River Valley Field Office, 2300 River Frontage Road, Silt, CO 81652*) within 30 days of the date of the decision if served a copy of the document, or otherwise within 30 days of the date of the decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 2801.10 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

**Surface-Use Conditions of Approval  
WPX Energy Rocky Mountain LLC  
12 Wells on the Existing DOE 2-M-35 Pad**

**GENERAL SURFACE-USE CONDITIONS OF APPROVAL**

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. 12.

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. 12. 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 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 Attachment 1 of the letter provided to operators dated September 9, 2014).

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 prohibited or restricted noxious 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.

An exception to these seeding requirements shall be made for seeding of sagebrush. Sagebrush seeding shall occur prior to winter snowfall, or on top of snow. Sagebrush may be sown either by broadcast seeding or by drill-seeding with the sagebrush seed placed in a separate “fluffy seed” box of the drill, with the drop tube left open to allow seed to fall out on the ground surface.

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

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding in project areas within pinyon-juniper, sagebrush shrubland, and/or salt desert shrub habitat types. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil. Mulch shall not be used within mountain shrub or spruce-fir forest habitat types, unless requested or approved by the BLM.

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 BMPs approved by the BLM. Additional BMPs such as biodegradable wattles, weed-free straw bales, or silt fences shall have be employed as necessary to reduce transport of sediments into the drainages. The BLM may, in areas with high erosion potential, require use of hydromulch or biodegradable blankets/matting to ensure adequate protection from slope erosion and offsite transport of sediments and to improve reclamation success.
- 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, including a description of the monitoring methods used, 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), including GPS data in accordance with the February 27, 2014 letter to operators, 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 **January 1 through March 1 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 the period of **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.

If subsurface cultural values are uncovered during operations, all work in the vicinity of the resource will cease and the Authorized Officer with the BLM notified immediately. The operator shall take any additional measures requested by the BLM to protect discoveries until they can be adequately evaluated by the permitted archaeologist. Within 48 hours of the discovery, the SHPO and consulting parties will be notified of the discovery and consultation will begin to determine an appropriate mitigation measure. BLM in cooperation with the operator will ensure that the discovery is protected from further disturbance until mitigation is completed. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

Pursuant to 43 CFR 10.4(g), the holder must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony on Federal land. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery that could adversely affect the discovery. The holder shall make a reasonable effort to protect the human remains, funerary items, sacred objects, or objects of cultural patrimony for a period of thirty days after written notice is provided to the authorized officer, or until the authorized officer has issued a written notice to proceed, whichever occurs first.

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.

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

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, where possible, 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 Colorado River Valley 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 CONDITIONS OF APPROVAL FOR THE DOE 2-M-35 PROJECT**

The following site-specific surface use COAs are in addition to the standard COAs listed above and all relevant stipulations attached to the respective Federal leases.

A. Pad / Road Construction and Reclamation Details.

The entire access road serving the DOE 2-M-35 pad shall be surfaced with a minimum 6-inch depth of gravel from Parachute Creek (CR 215) Road to the DOE 2-M-35 pad.

In effort to minimize the impact on the existing slump above the northeast pad corner, the cutslopes on the pad shall be constructed at 1:1 slope as noted on the construction plat #2.

The existing rock wall constructed along the western edge of the pad shall remain undisturbed and continue to functionally serve as the pad edge along the existing drainage. No sidecasting of material will be allowed within the west-side drainage.

The realigned drainage along the south side of the pad shall be constructed with a sizable berm to contain cuttings against the berm. After the cuttings have been removed to the pad cutslopes during interim reclamation work, the realigned drainage shall be reclaimed in a manner that achieves a natural functioning drainage with established sediment catches and controls.

Since topsoil storage space is very limited, topsoil shall be piled where possible along the north side of the cutslope and along the southern edge of the cuttings storage area. Soil amendment practices shall be implemented during interim reclamation and seeding to enhance reestablishment of desirable vegetation on the reclaimed pad area.

The pad shall be constructed prior to January 1, 2015 winter timing limitation per geotechnical engineer recommendation so the pad can withstand the rigors of winter weather, spring snowmelt and muddy conditions prior to drilling any wells on the pad.

Cuttings shall be temporarily stored at the base of the south fillslope between the road and realigned drainage during the rig visit. At the time of interim reclamation, the cuttings shall be hauled to the pad for placement against the pad cutslopes. Once cuttings have satisfied COGCC testing standards, the cuttings shall be buried onsite within the slope reshaping of the interim reclamation work.

The VOC combuster noted on Facility Layout Drawing in the APD shall be staged in proximity to the equipment pad or along the access road instead of the noted location within the cuttings storage area.

The numerous flowlines to be buried within the access road ramp shall be buried at least 10 feet or deeper (as measured from the existing road grade) during the pad construction and equipment setup to allow the steep grade of the road ramp to be reduced and improve sight distance on the road approach to the pad.

- B. Pipeline Construction, Installation and Maintenance. The 8-inch diameter welded steel natural gas pipeline and 4-inch diameter flanged Flexsteel water line shall be buried concurrently in the same trench within the authorized right-of-way width. The pipelines shall be installed to industry and BLM "Gold Book" standards. (*Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development: The Gold Book. Fourth Edition—Revised 2007;(P-417 BLM/WO/ST-06/021+3071/REV 07.)*)

The centerline of the ROW and the exterior limits shall be clearly flagged prior to any construction activity. Topsoil shall be windrowed and segregated from the spoil piles along the pipeline corridor.

The pipeline(s) shall be buried with at least 4 feet of cover from the top of the pipe to the surface. All of the new lines shall be tested with air prior to being placed into service.

Pipelines installed beneath ephemeral drainages or 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.

The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way. Any relocation, additional construction, or use that is not in accord with the approved plan of development, shall not be initiated without the prior written approval of the authorized officer.

- C. Agreements with Other ROW Grant Holders. Potential impacts to existing BLM ROWs by the rights-of-way to be authorized to WPX shall be mitigated based on written maintenance and use agreements between the existing ROW holders. Such agreements shall be obtained and verified with the BLM prior to any disturbance or construction across or adjacent to an existing right-of-way.
- D. Indemnification. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601 *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the ROW (unless the release or threatened release is wholly unrelated to the operator's activity in the ROW). This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- E. Compliance with Laws and Regulations. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601 *et seq.*) with regard to any toxic substances that are used, generated by, or stored on the ROW or on facilities authorized under the ROW grant (see 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or state government as a result of a reportable release of spill of any toxic substances shall be furnished to the BLM concurrent with the filing of the reports to the involved Federal agency or state government.
- F. Private Landowners and Existing Rights-of-Way. The operator shall obtain agreements allowing construction with all existing authorized surface users of Federal ROW locations prior to surface disturbance or construction of the location, staging areas, or access across or adjacent to any existing ROW locations. In the case of privately owned surface, the operator shall certify to BLM that a Surface Use Agreement has been reached with the authorized surface user prior to construction.
- G. Chemical Storage and Use. The operator shall not store hazardous materials, chemicals, fuels, lubricating oils, or perform concrete coating activities within 200 feet of any waterbody or dry drainage. Equipment or vehicles that are crossing or working within 200 feet of water bodies shall not be refueled unless the Environmental Inspector gives a specific exception. If any hazardous material must be temporarily stored or transferred within 200 feet of a waterbody (i.e. stationary pumps), then it must be placed within a secondary containment structure that is capable of containing 110 percent of the volume of the stored material.
- H. Saturated Soil Conditions. When saturated soil conditions exist on or along the ROW any type of construction shall be halted until soil material dries out or is frozen sufficiently for construction to proceed without undue damage and erosion to soils.

- I. As-Built Survey. An as-built centerline survey of the right-of-way crossing Federal land, provided by a Certified Land Surveyor licensed to work in the State of Colorado, shall be provided to the AO within 2 months of completion of the project.
- J. Utility Locates. All existing pipelines, surface valves, and other utilities shall be field located, clearly marked, and the appropriate Utility Notification Center ([www.unc.org](http://www.unc.org)) shall be notified before any construction/surface work occurs. All publicly owned underground facilities shall be marked according to the APWA color code.
- K. Survey Monuments. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority, if known. Where General Land Office or BLM right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a BLM Cadastral Surveyor to restore the disturbed Monument(s) and References using survey procedures found in the Manual of Surveying Instruction of the Survey of the Public Lands in the United States, latest edition. The holder shall record survey into the appropriate county and send a copy to the authorized officer.
- L. Plant Habitat Protections. The following specific conservation and mitigation measures for DeBeque phacelia (*Phacelia submutica*) shall be implemented for this project:

If project construction for DOE 2-M-35 is delayed until the 2015 growing season, DeBeque phacelia surveys shall be performed in accordance with standard survey protocols. If plants are detected, consultation with USFWS shall be reinitiated, which could result in changes to the project construction area and recommended conservation measures outlined below.

If construction occurs prior to the next DeBeque phacelia growing season, the following conservation measures shall be applied to project construction.

- (1) Erosion related impacts should be effectively mitigated through measures included in the Surface Use Plan of Operations submitted to BLM by WPX such as: pipeline and pad construction work would follow the guidelines established in the BLM Gold Book, *Surface Operating Standards for Oil and Gas Exploration and Development* (USDI/USDA 2007); interim reclamation would occur immediately following drilling/completion operations; the existing pad access road would be graveled; onsite and offsite erosion control, revegetation of disturbed areas and source and storage of topsoil will be handled per WPX Energy Stormwater and Reclamation best management practices; topsoil would be stripped during the initial earthwork and piled, where possible, in available locations around the disturbance perimeters, and designed to serve as storm water controls.
- (2) To prevent accidental trampling or vehicle impacts, a temporary plastic fence (a minimum of 42 inches in height) or flagged wooden lath, or other marking systems acceptable to the BLM shall be installed along the edge of disturbed areas where mapped potential (suitable) habitat is within 20 meters of disturbance or at locations designated by the BLM to restrict foot traffic or equipment use.
- (3) WPX shall restrict all personnel to areas within the boundary of project disturbance on all BLM lands. Exception shall be made only if approved by the BLM botanist.

- (4) The proposed construction within a 100-meter buffer of mapped potential habitat shall only occur outside of the plant growth period of DeBeque phacelia of April through June (Spackman et al. 1997) during flowering years. Determination of a non-flowering year shall be made by the BLM botanist, in conjunction with the USFWS.
- (5) Surface disturbing activities located within 100 meters of mapped delineated DeBeque phacelia habitats (suitable and marginal) shall have dust control measures implemented. Dust abatement applications shall be limited to water only to prevent negative impacts from additives.
- (6) To prevent impacts from herbicide drift and from noxious weeds, no herbicide shall be applied within 20 meters of any mapped DeBeque phacelia habitat. Within these herbicide prohibition buffers, noxious weeds in these areas shall be controlled by manual treatments. In areas between 20 meters and 100 meters of mapped DeBeque phacelia habitat, spot treatments of noxious weeds may be made using herbicide, only when no DeBeque phacelia plants are present within mapped habitat areas. A BLM approved Pesticide Use Proposal (PUP) noting this sensitive area restriction must be obtained prior to any herbicide use. All mapped habitat areas within 100 meters of planned herbicide use shall be surveyed for DeBeque phacelia plants by a BLM approved botanist prior to any herbicide application. If DeBeque phacelia plants are found, the BLM botanist shall be notified immediately, and consultation with USFWS shall be reopened.
- (7) If botany surveys are conducted at the appropriate time of year, in a year when DeBeque phacelia plants are present at known sites of similar elevation and moisture conditions, and no DeBeque phacelia plants are found within the mapped habitat areas, the protections listed above shall no longer be necessary.

M. Surface Use Agreement. Prior to reconstruction of the GM 14-35 frac pad planned on private property, WPX shall certify to the BLM that they have executed a Surface Use Agreement with the landowner.

# 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 Number: COC 27743, COC 62163  
Pad: DOE 2-M-35  
Engineer: Bob Hartman  
Surface Location: Garfield County; Lot 12, Sec. 35 T6S R96W

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 the petroleum engineer 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, the petroleum engineer 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 30,000 psi or greater shall be used.
5. Flexible choke lines shall meet or exceed the API SPEC 16C requirements. Flexible choke lines shall have flanged connections and configured to the manufacturer's specifications. The flexible choke lines shall be anchored in a safe and workmanlike manner. At minimum, all connections shall be effectively anchored in place for safety of the personal on location. 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 to the petroleum engineer on the first well drilled on the pad or any horizontal well and record results in the IADC log. A failed pressure integrity test is more than 10% pressure bleed off in 15 minutes. Report failed test to the petroleum engineer.
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 – Petroleum Engineer, 2300 River Frontage Road, Silt, CO 81652. Contact 970-876-9000 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 CRF 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, the petroleum engineer 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 the petroleum engineer immediately.
15. All surface casing strings must be set to a depth of 1,000' or deeper to protect potentially useable water zones. Please submit updated Geological and Drilling Prognosis for the wells with surface casing set less than 1,000' by Sundry Notice (Form 3160-5).

**Contact Information**

**Colorado River Valley Field Office**  
 Petroleum Engineer

Office: (970) 876-9000  
 CRVFO\_PE@blm.gov

**Bob Hartman**  
 Petroleum Engineer

Office: (970) 244-3041  
 Cell: (970) 589-6735  
 bhartman@blm.gov

<b>List of Wells</b>			
<i>Proposed Pad</i>	<i>Proposed Wells</i>	<i>Surface Location</i>	<i>Bottom Hole Locations</i>
DOE 2-M-35 (BLM Surface)	GM 11-35	T6S R96W, Sec. 35 Lot 12	T6S R96W, Sect. 35 Lot 4
	GM 21-35		T6S R96W, Sect. 35 Lot 3
	GM 321-35		T6S R96W, Sect. 35 Lot 3
	GM 312-35		T6S R96W, Sect. 35 Lot 5
	GM 313-35		T6S R96W, Sect. 35 Lot 12
	GM 323-35		T6S R96W, Sect. 35 Lot 11
	GM 423-35		T6S R96W, Sect. 35 Lot 11
	GM 322-35		T6S R96W, Sect. 35 Lot 6
	GM 513-35		T6S R96W, Sect. 35 Lot 12
	GM 421-35		T6S R96W, Sect. 35 Lot 3