

DECISION RECORD

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-86 through 93

Section 390, Energy Policy Act of 2005

**Yates Petroleum Corporation, Folklore Com 3PH, Cousins Federal Com 24TH, Quill Federal Com 6 & 7 PH, Muffin Com 1 TH and the Moore Deep 1 – Church Com 9TH, Mike Com 8TH and Patricia Com 7TH Applications for Permit to Drill (APDs)
Bureau of Land Management, Buffalo Field Office, Wyoming**

DECISION. The BLM approves 8 (Deferring the Mike Com 8TH APD) applications for permit to drill (APDs), 1 to 2 wells per pad and their associated infrastructure, from Yates Petroleum Corporation (Yates) as listed above and in the table below and as consolidated in their CX3, incorporated here by reference.

Compliance. This decision complies with or supports:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701); DOI Order 3310.
- National Environmental Policy Act of 1969 (NEPA) (42 USC 4321).
- National Historic Preservation Act of 1966 (16 USC 470).
- Endangered Species Act of 1974 (16 USC 1531).
- Powder River Basin Final Environmental Impact Statement (FEIS), 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2003, 2011.
- Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands (WY-IM-2012-019) and Greater Sage-Grouse Interim Management Policies and Procedures (WO-IM-2012-043).

A summary of the details of the approvals follows. The CX3 analysis, for these proposed oil and gas wells, includes the project descriptions, including site-specific mitigation measures which are incorporated by reference into these CX3 analyses from earlier analysis. The proposed wells are approximately 7 to 13 miles west, SW of Wright, in Campbell County, Wyoming. The operator’s proposed APDs, along with associated infrastructure, are to develop and produce oil and gas from the targeted formation in or through federal minerals. These wells are horizontal bores proposed on a 320 to 640 acre spacing pattern. Surface ownerships are State of Wyoming and private.

Approvals. BLM approves the following APDs and associated infrastructure. Split Estate (S.E.):

#	Well Name & #	Qtr	Sec	Twp	Rng	Surface Lease	Lateral Lease	Bottom Hole Lease	CX Number
1*	Folklore Com 3PH	NENE	36	43N	73W	Fee/Fee	Fed	Fee	WY-070-390CX3-15-86
2*	Cousins Fed Com 24TH	SESW	34	44N	74W	Fee/Fee	Fed	Fed	WY-070-390CX3-15-87
3*	Quill Federal Com 6PH	NENE	25	43N	73W	Fee/Fee	Fee	Fed	WY-070-390CX3-15-88
4*	Quill Federal Com 7PH	NENE	25	43N	73W	Fee/Fee	Fee	Fed	WY-070-390CX3-15-89
5	Muffin Com 1TH	NENE	14	43N	73W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-90
6	Moore Deep 1-Church Com 9TH	NENE	33	44N	74W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-91
7	Moore Deep 1-Patricia Com 7TH	SWSE	24	44N	74W	Fee/Fed(S.E.)	Fed Fee	Fee	WY-070-390CX3-15-93

*BLM’s Instruction Memorandum IM-2009-078 entitled Processing Oil and Gas Applications for Permit to Drill for Directional drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Estate Locations will apply (COA’s are recommended).

Deferrals. BLM defers the following APD and associated infrastructure:

#	Well Name & #	Qtr	Sec	Twp	Rng	Surface Lease	Lateral Lease	Bottom Hole Lease	CX Number
1	Moore Deep 1- Mike Com 8TH	NWNW	23	44N	74W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-92

Limitations. BLM defers its decision on 1 APD since the compliance with Section 106 of the National Historic Preservation Act (NHPA) and the NEPA analysis is not complete and BLM cannot issue a final decision on the application. Construction of the proposed Mike Com 8TH well will result in an adverse effect to the setting of eligible site 48CA1568, the Deadwood Trail. BLM must continue consultation with the Wyoming State Historic Preservation Officer (SHPO), Yates Petroleum, the landowner and potentially with other parties the SHPO may suggest to determine what steps may be necessary to resolve the adverse effect to the site. The consultation will result in the completion of a memorandum of agreement (MOA) describing mitigation measures that will be included as conditions of approval with the APD. Once the MOA is completed, BLM will be able to issue a decision. Yates Petroleum can assist BLM by participating in the MOA process. More information and an official letter initiating the consultation is forthcoming. See also the conditions of approval (COAs) for these wells.

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI). Congress, the Department of Interior and BLM affirmed there was no significant impact of a like-structured project when they created this CX3 analysis process and its limiting parameters. This consolidated CX3 analysis tiers to NEPA analyses which received a FONSI, thus a new FONSI or EIS is not required.

Summary of NEW INFORMATION. BLM posted the APDs for 30 days and received no public comments. Since BLM received these APDs, it received no new clarifying policies for APD processing.

DECISION RATIONALE. The approval of these projects is because:

1. BLM and Yates included design features and mitigation measures (conditions of approval (COAs)) to reduce environmental impacts while meeting the BLM's need. For a complete description of all site-specific COAs, see the COAs.
 - a. The impact of this development cumulatively contributes to the potential for local extirpation of the Greater Sage Grouse (GSG) yet its effect is acceptable because it is outside priority habitats and is within the parameters of the PRB FEIS/ROD and current BLM (WO-IM-2012-043) and Wyoming (WY-IM-2012-019) GSG conservation strategies.
 - b. With application of Standard Operating Procedures (SOPs), applied mitigation, Required Design Features, and COAs identified for Greater Sage-Grouse under the [proposed action], impacts caused by surface-disturbing and disruptive activities would be minimized.
 - c. There are no conflicts anticipated or demonstrated with current uses in the area.
2. The Resource Management Plan (RMP) for the Buffalo Field Office is currently undergoing revision. The Draft RMP and Environmental Impact Statement was released in June 2013. The proposed action was screened against the Draft RMP to ensure that the proposed action would not preclude BLM's ability to select any alternative in a ROD. The proposed action was also determined to not be inconsistent with the direction outlined in the RMP's Preferred Alternative.
3. The deferral of the Moore Deep 1 Mike Com 8TH and its infrastructure allow the operator and BLM additional time to develop acceptable mitigation to resolve the adverse effect to the setting of the Deadwood Trail. In addition to the deferral language, justification, and remedy provided above, the deferrals are proper under the standard lease terms, the rationale in the Buffalo RMP, and Wyoming BLM policy.

4. Approval of this project conforms to the terms and the conditions of the 1985 Buffalo RMP (BLM 1985) and subsequent update (BLM 2001) and amendments (BLM 2003, 2011). This project complies with the breadth and constraints of CX3, Energy Policy Act of 2005, and subsequent policy.
5. The APDs/project will help meet the nation's energy need, revenues, and stimulate local economies by maintaining workforces.
6. The operator, in their APD/POD, shall:
 - Comply with all applicable federal, state, and local laws and regulations.
 - Offer water well agreements to the owners of record for permitted water wells within 0.5 mile of a federal producing well in the POD (PRB FEIS ROD, p. 7).
7. The project lacks wilderness characteristics. A wilderness characteristics inventory was completed in 2013; no lands with wilderness characteristics were identified outside the Big Horn Mountains. The inventory is available at:
<http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html>.
8. This decision does not foreclose the lessee or operator to propose a new or supplementary plan for developing the federal oil and gas leases in this project area, including submission of additional APDs to drain minerals in accord with lease rights and law. This decision does not foreclose the lessee or operator to propose using external pumping units via a sundry application process.
9. The operator certified there is a surface access agreement with the landowners or it posted a bond.
10. This approval is subject to adherence with all of the operating plans, design features, and mitigation measures contained in the surface use plan of operations, drilling plan and information in the individual APDs.

ADMINISTRATIVE APPEAL. This decision is subject to administrative appeal in accord with 43 CFR 3165. Request for administrative appeal must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received. Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

Field Manager: _____ /s/ Duane W. Spencer _____

Date: _____ 4/28/2015 _____

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-86 through WY-070-390CX3-15-93
Section 390, Energy Policy Act of 2005
Yates Petroleum Corporation, Folklore Com 3PH, Cousins Federal Com 24TH, Quill Federal Com 6PH & 7PH, Muffin Com 1TH and Moore Deep 1 PODs Church Com 9TH, Mike Com 8TH and Patricia Com 7TH Applications for Permit to Drill (APDs)
Bureau of Land Management, Buffalo Field Office, Wyoming

Description of the Proposed Action. Yates Petroleum Corporation (Yates) submits 8 applications for permit to drill (APDs) for 8 horizontal oil and gas wells and construct associated infrastructure in the Plan of Developments (PODs) as follows:

Table 1.1. Proposed Wells. Split Estate (S.E.)

#	Well Name & #	Qtr	Sec	Twp	Rng	Surface Lease	Lateral Lease	Bottom Hole Lease	CX Number
1	Folklore Com 3PH	NENE	36	43N	73W	Fee/Fee	Fed	Fee	WY-070-390CX3-15-86
2	Cousins Fed Com 24TH	SESW	34	44N	74W	Fee/Fee	Fed	Fed	WY-070-390CX3-15-87
3	Quill Federal Com 6PH	NENE	25	43N	73W	Fee/Fee	Fee	Fed	WY-070-390CX3-15-88
4	Quill Federal Com 7PH	NENE	25	43N	73W	Fee/Fee	Fee	Fed	WY-070-390CX3-15-89
5	Muffin Com 1TH	NENE	14	43N	73W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-90
6	Moore Deep 1-Church Com 9TH	NENE	33	44N	74W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-91
7	Moore Deep 1-Mike Com 8TH	NWNW	23	44N	74W	Fee/Fed(S.E.)	Fed/Fee	Fee	WY-070-390CX3-15-92
8	Moore Deep 1-Patricia Com 7TH	SWSE	24	44N	74W	Fee/Fed(S.E.)	Fed Fee	Fee	WY-070-390CX3-15-93

*BLM's Instruction Memorandum IM-2009-078 entitled Processing Oil and Gas Applications for Permit to Drill for Directional drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Estate Locations will apply (COA's are recommended).

The proposed horizontal wells are within historic and current oil and gas and coalbed natural gas (CBNG) development. These wells are on private and State of Wyoming surface, over federal minerals and fee minerals then horizontally going through federal minerals to fee mineral or federal minerals (See table above). The project area is 7 to 13 miles West, Southwest of Wright, in Campbell County, Wyoming. Elevation of this project is 4,900 to 5,300 feet. The topography has gently to steep sloped draws rising to mixed sagebrush and grassland uplands, with some areas of developed farming and ranching lands. Ephemeral tributaries of Porcupine and Four Mile Creek drain the area. The climate is semi-arid, averaging 10-14 inches of precipitation annually, about 60% of which occurs between April and September. The surface owners are Patricia Moore, Michael Moore, James Spomer, and Richard Leavitt; see the Surface Use Plan of Operations (SUPO). The Administrative Record (AR) is available for public review at the Buffalo Field Office (BFO).

The BLM's need for this project is to determine whether, and if so, and under what conditions to support the Buffalo Resource Management Plan's (RMP) goals, objectives, and management actions with permitting the operator's exercising of conditional lease rights to develop federal fluid minerals. APD information, which BLM incorporates here by reference, is an integral part of these CXs. Conditional fluid mineral development supports the RMP, the Mineral Leasing Act of 1920, the Federal Land Policy Management Act (FLPMA), and other applicable laws and regulations.

The operator submitted applications for permit to drill (APDs), to the BFO on August 7, September 12 & 22 and October 22, 2014. Onsite inspections were completed on October 21 and November 12, 2014. The onsites evaluated the proposals and modified them to mitigate environmental impacts. The BLM sent post-onsite deficiency letters to the operator on November 3, and December 2 & 18, 2014.

Drilling, Construction & Production design features include:

- The operator anticipates completing drilling and construction in 2 years. Drilling and construction is year-round in the region. Weather may cause delays, but delays rarely last multiple weeks. Timing limitations in the form of COAs and/or agreements with surface owners may impose longer temporal restrictions. The operator anticipates that estimated drilling duration will be 60 days and 90 day for completion, depending on circumstances. Approximately 80,000 barrels (bbls) of water will be used for drilling and completion of each well.
- A road network that will consist of existing improved all-weather roads; existing primitive (2-track) roads to be upgraded to all-weather improved roads; and proposed improved well access roads. The operator will use existing roads as much as possible.
- There will be a reserve pit at these oil well locations during drilling and completion.
- 11.08 miles of 3 to 4 inch, temporary, surface water lines for drilling and completion will be used. The surface lines will be removed when all wells have been drilled and completed.
- No off-site ancillary facilities are planned for this project. No staging areas, man camps/housing facilities are anticipated to be used off-site. Working trailers and sleeping trailers will be placed on the well pads during the drilling and completion of each well.
- If a well becomes a producer, production facilities will be located at the well site and will include a pumping unit, storage tanks, buildings, oil-water separator (heater-treater). There will be no pits at these producing oil well locations.
- An existing and/or above ground power line will be used if a well becomes a producer. Power will be provided by a 3rd party contactor. Generators will be used for power until permanent power is obtained. It is anticipated that new construction of power will begin at existing 3-phase overhead lines or buried power lines closest to the well and continue adjacent to the well pad.
- Well pad disturbance during construction and drilling will be approximately 7 to 9 acres (this includes cut and fill and soil stock pile areas). Once a well is completed, any area of the well pad not needed for production will be reclaimed, reducing the pad area by approximately 0.92 acres, for interim reclamation.
- Hydraulic fracturing (HF) operations are planned as a 'plug & perf' operation done in stages. The process is anticipated to require 14 days to complete. Drilling and completion water will come from either municipal water supplies from Wright or Gillette, Wyoming, permitted water wells, produced water directly from a CBNG well or treated water collected in lined pits or reservoirs. The water will be contained in either a lined pit or HF tanks. No additional well pad disturbance is anticipated for HF operations. Completion flowback water will be held in either the lined reserve pit or in tanks on location, until it can be either trucked or piped offsite to a disposal facility permitted by Wyoming Department of Environmental Quality (WDEQ).
- Typically 170 500-bbl HF tanks are spotted, taking 2 weeks to fill (approx.12 tanker loads/day), prior to pumping the stimulation. All HF water, including excess, is present before starting.
- Flowback equipment and tanks are spotted 2-3 days before pumping. Sand silos are spotted and filled 2-3 days prior to pumping.
- Next pump trucks and chemical mixing equipment arrive and, when ready, operations continue for 36-48 hours or 3-5 days depending on the type of stimulation stage isolation (i.e. packers/sleeves or plug/perf respectively).

Table 1.2. Disturbance Summary for the 8 well projects:

Proposed Facility	# or Miles	Factor	Disturbance
Engineered Pad Including Disturbance Off Pad	8 Well Pads	Varies from 7ac.-9ac. per Pad	53.5 acres
Improved Roads with Corridor	0.21 miles	75 ft. wide	1.92 acres
Improved Roads no Corridor	1.03 miles	65 ft. wide	2.54 acres
Buried Electric Line	2.38 miles	25 to 30 ft. wide	7.51 acres
Buried Water Line	0.45 miles	45 ft. wide	2.48 acres
Total Surface Disturbance			67.95 acres

Off Well Pad

The operator will install a buried 3 to 6 inch high-density polyethylene (HDPE) gas gathering pipeline of at least 125 psi rating from each producing well to transport natural gas from the well to a gas gathering trunkline and on to a compressor facility. Gas gathering trunk lines will typically consist of 6 to 24 inch HDPE buried lines of at least 125 psi rating. Yates will install a temporary, above ground water line and or buried 2 to 6 inch corrosion resistant water gathering pipeline (for the length of the project) of at least 150 psi rating from the well to transport water to a water gathering trunkline and/or to an approved water disposal well in the area. Electric power to the wells will be buried from existing power drops, from overhead power, nearest the wells.

Plan Conformance, Compliance, and Justification with the Energy Policy Act of 2005

The Energy Policy Act of 2005, Section 390(a) subjects oil or gas exploration or development to a rebuttable presumption that the use of a categorical exclusion under the National Environmental Policy Act (NEPA) applies. Thus BLM must use an Energy Policy Act, Section 390(b), CX unless BLM rebuts the presumption. This CX3 analysis is NEPA compliance categorically excluded from an EA or EIS or their analysis; it is not an exclusion from all analysis. (40 CFR 1508.4 and BLM H-1790, p. 17.) The proposals conforms with the terms and conditions of the approved Resource Management Plan (RMP) for the public lands administered by the BLM, BFO, 1985, and Resource management Amendments 2001, 2003, 2011 as required by 43 CFR 1610.5, 40 CFR 1508.4, 43 CFR 46.215. BLM finds that the conditions and environmental effects found in the senior EAs and PRB FEIS remain valid. The applicable categorical exclusion from the Energy Policy Act of 2005, Section 390, is exclusion number (b)(3) which is *drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well.*

BLM has 3 requirements to use a Section 390 CX3, (BLM H-1790, Appendix 2, #3, p. 143):

- 1) The proposed APD is in a developed oil or gas field (any field with a completed confirmation well).

Table 1.3 is a list of existing NEPA analyses within, adjacent to or similar to the proposed projects. This information shows the reader that BLM conducted analysis.

Table 1.3. NEPA Analyses which BLM Incorporates by Reference as having Similar Analyses.

#	Oprator/POD / Well Name	NEPA Document #	# / Type Wells	Decision Date
1	Yates- Baker 8H, Fourmile 20H, Jeanne 5H, Starlight 30H & Strangler 1H	WY-070-EA14-224	5 Oil	5/2014
2	Anadarko- Crazy Cat East	WY-070-EA13-028	36 Oil	3/2013
3	Sahara POD EA	Lance Oil and Gas Inc	21 oil and gas wells	3/2013

- 2) The reasonably foreseeable activity (RFA) is found in the PRB FEIS and BFO's RMP for this and adjacent areas which includes oil/gas exploration on 320 to 640 acre spacing or more for horizontal wells and 40 to 80 acre spacing for vertical wells. (This does not preclude the RFA spacing analysis in the PRB FEIS or applying to drill multiple wells from a pad further reducing the surface disturbance per well.) The RFA in the project analysis area is well within the RFA of the PRB FEIS total of 54,200 fluid mineral wells. Potential APD submittals or reasonably foreseeable activity included in this analysis could consist of more, single and/or multiple wells on existing or proposed pads and would, as much as possible, tie into existing supporting infrastructure; tank batteries, pipelines, power lines, and transportation networks.
- 3) The tiered NEPA analyses were finalized or supplemented within 5 years of spudding (drilling) the proposed wells. The proposed wells tier to the NEPA analyses listed in Table 1.3.

In summary the EAs in Table 1.3 analyzed in detail the anticipated direct, indirect, residual, and cumulative effects that would result from the approval of these APDs and associated support structure of the proposed wells. The BLM reviewed the analyses and found that the analyses considered potential environmental effects associated with the proposal at a site specific level. The proposed APDs' surface use and drilling plans are incorporated here by reference and show adequate protection of surface lands and ground water, including the Fox Hills Formation. The proposal's acres of surface disturbances are within the analysis parameters of the PRB FEIS.

Plan of Operations

The proposals conform to all Bureau standards and incorporates appropriate best management practices, required and designed mitigation measures determined to reduce the effects on the environment. BLM reviewed and approved a surface use plan of operations describing all proposed surface-disturbing activities pursuant to Section 17 of the Mineral Leasing Act, as amended. These CX3s also incorporate the implementation of committed mitigation measures contained in the SUP, drilling plan, in addition to the Standard COAs found in the PRB FEIS ROD, Appendix A.

Soils/Vegetation

Major ecological sites in these projects are Loamy and Clayey. Impacts anticipated occurring and mitigation considered with the implementation of these proposals are similar to those analyzed in the Baker 8H, Fourmile 20H, Jeanne 5H, Starlight 30H and Strangler 1H, Sections 3.2 and 4.2. and Crazy Cat East, Sections 3.2 and 4.2.2.1

Water Resources.

The historical use for groundwater in this area was for stock or domestic water. A search of the WSEO Ground Water Rights Database as presented in the operators' MSUP showed there are permitted water wells within 1 mile of the proposed wells. Depths of the permitted wells range from 30 feet to 357 feet below ground surface. The list of water wells within a mile of the proposed production wells is located in each corresponding MSUP. For additional information on groundwater, refer to the PRB FEIS, pp. 3-1 to 3-36.

Table 1.4. Water Wells

Well Name	Surface Casing Depths	Ft Union Depth	Water Wells w/in 1 Mile	Water Well Depths
Church Com 9TH	2300	6629-6703	7	150-300
Mike Com 8TH	2450	6532-6627	7	150-300
Patricia Com #7TH	2400	6220-6330	7	150-300
Cousins 24TH	2450	6597-6671	4	165-357
Quill Fed 6ph	2300	6168-6265	12	30-350
Quill Fed 7PH	2300	6168-6265	12	30-350
Muffin Com 1TH	2350	6401-6483	2	138-180
Folklore 3PH	2250	6166-6451	15	50-350

Yates proposed several sources for their water needed to drill and develop the wells. The water will either be trucked or piped via temporary surface lines to each well pad and stored in tanks and/or a pit to be used as needed. Yates proposes that 40,000 to 80,000 bbls of water per well will be used for the drilling and development of each well. For more detailed information refer to the MSUP for each proposed well.

Adherence to the drilling COAs, the setting of casing at appropriate depths, following safe remedial procedures in the event of casing failure, and using proper cementing procedures should protect any fresh water aquifers above the target zone. The surface casing will be installed varying between wells at depths of 2,250 to 2,450 feet below ground surface (bgs). The anticipated depth of the Fox Hills Formation is between 6,168 to 6,703 ft bgs for the wells. The operator will use centralizing stabilizers on each casing joint through the Fox Hills Formation to insure the cementing encapsulates the casing and seals the formation off from contamination. The cement will extend 50 feet above and below the formation. The operator committed in the MSUP to abide to the state and federal regulations for the drilling and production of the wells. Therefore, no direct or indirect adverse effects are anticipated. This will ensure that ground water will not be adversely impacted by well drilling and completion operations.

At the time of permitting, the volume of water that will be produced in association with these federal minerals is unknown. The operator will have to produce the wells for a time to be able to estimate the water production. In order to comply with the requirements of Onshore Oil and Gas Order #7, Disposal of Produced Water, the operator will submit a Sundry to the BLM within 90 days of first production which includes a representative water analysis as well as the proposal for water management.

The WOGCC monitors and regulates the chemicals for drilling and completion as Class II underground injection disposal. “BLM may rely on the actions of state regulators. The IBLA and federal courts recognized it is appropriate for BLM to assume a proposed action complies with state permitting requirements, and rely on state analysis when evaluating the significance of effects. *Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs*, 351 F. Supp. 2d 1232, 1244 (D. Wyo. 2005); *PRBRC*, 180 IBLA 32, 57 (2010); *Bristlecone Alliance*, 179 IBLA 51, 74-77 (2010).” In *Wyoming Outdoor Council*, the District Court held the Corps may rely on the WDEQ permitting process to “ameliorate any concerns that impacts to water quality will be significant.” *Id.*

During construction and subsequent production of these wells, Yates committed to stabilize the constructed area to reduce the risk of sediment transport due to erosion. This and complying with WDEQ Storm Water Pollution Prevention criteria will minimize impacts to surface water resources in the area.

Historically, the quality of water produced in association with conventional oil and gas has been such that surface discharge would not be possible without treatment. Initial water production is quite low in most cases. Yates proposes to dispose of the produced and flow back water to state permitted facilities.. The water will either be trucked or piped via underground water lines to the locations from the storage tanks and/or reserve pit located on the well pad. For more information, refer to the MSUP for each proposed well. Yates would be protective of groundwater resources when water disposal from the wells is performed in compliance with state and federal regulations

Other Leasable and Locatable Minerals

The projects area is over and amidst uranium mineral leases. The Fort Union and the Wasatch Formations are the most important uranium-bearing formations in the PRB and are less than 800 feet deep. Uranium recovery has surface disturbance for the construction of surface facilities, roads, well fields, utilities, and pipelines, and include top soil removal, land grading, and interim reclamation. Presently there is no active uranium development in this immediate area. Direct and indirect effects, cumulative effects, mitigation measures, and residual effects are found in the approved projects in Table 1.3, incorporated here by reference:

1. Baker 8H, Fourmile 20H, Jeanne 5H, Starlight 30H and Strangler 1H, Sections 3.4 and 4.4.
2. Crazy Cat East, Sections 3.4 and 4.3.

Invasive Species

Impacts anticipated occurring and mitigation considered with the implementation of the proposals will be similar to those analyzed in the EAs, in Table 1.3, which are adjacent or overlapping to these proposals, have substantially similar characteristics, and are incorporated here by reference:

1. Baker 8H, Fourmile 20H, Jeanne 5H, Starlight 30H and Strangler 1H, Sections 3.5 and 4.4.
2. Crazy Cat East, Sections 3.7 and 4.5.

Wildlife

BLM reviewed the APDs and determined that the proposal, combined with the COAs (and design features), is: (1) consistent with the FEIS and its supplements, the RMP and the above tiered EAs; and (2) consistent with the programmatic biological opinion (ES-6-WY-02-F006), PRB FEIS, Appendix K. The BLM biologist performed an onsite inspection of the project area on October 21 and November 12, 2014. BLM wildlife biologists also consulted databases compiled and managed by BLM BFO wildlife staff, the PRB FEIS, WY Game and Fish Department (WGFD) datasets, and the Wyoming Natural Diversity Database (WYNDD) to evaluate the affected environment for wildlife species that may occur in the area. The proposed wells and infrastructure are a result of attempts by the operator and the BLM to reduce impacts to identified wildlife resources. The affected environment and environmental effects for wildlife are discussed in, and anticipated to be similar to the approved projects in Table 1.3., specifically # 3 (Sahara POD) and is incorporated here by reference. Rationale for species not discussed in detail below can be referenced in the administrative record ((Table W.1.(Summary of Sensitive Species Habitat and Project Effects) and Table W.2. ((Summary of Threatened and Endangered Species Habitat and Project Effects)).

Land uses and other disturbances occurring within the proposed project area include, livestock grazing, ranching operations, overhead power lines, conventional oil and gas, and improved and unimproved roads. Habitats within the proposal are comprised of sagebrush grassland and mixed-grass prairie. Habitats within the proposal are comprised of sagebrush grassland and mixed-grass prairie. The dominant vegetation is Wyoming big sagebrush and the understory is a mix of pasture grasses (needleandthread, prairie junegrass, blue gramma, Sandberg bluegrass, threadleaf sedge, and cheatgrass).

Proposed Folklore Com 3PH, Cousins Fed Com 24TH, Quill Federal Com 6PH, and Quill Federal Com 7PH wells are located on fee surface above fee minerals. And the Bottom hole location for the those wells

are associated with federal leases. Therefore, BLM's Instruction Memorandum (IM) No. 2009-078 entitled Processing Oil and Gas Applications for Permit to Drill for Directional Drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Estate Locations will apply to the proposal (COA's are only recommended).

Folklore Com 3PH

Greater Sage-Grouse (GSG)

Nesting GSG habitat exists within the proposal area. The majority of the sagebrush stands have been fragmented by oil and gas development. The proposal is within 2-miles of the occupied Spring Creek GSG Lek. The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.4.1, p.18-19). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.4.1, pp. 34-37) to GSG from surface disturbing and disruptive activities associated with development of horizontal oil wells. The BLM IM WY-2012-019 establishes interim management policies for proposed activities on BLM-administered lands, including federal mineral estate, until RMP updates are complete.

Typically, the well pad and associated infrastructure would have a timing limitation applied as a COA to reduce negative impacts to the local GSG population and to be in compliance with WY BLM policy, the State of Wyoming's Greater Sage-Grouse conservation strategy (Executive Order (EO) 2011-5 Greater Sage-grouse Core Area Protection), and the BFO RMP. However, per IM No. 2009-078, the timing limitation COA is recommended only. If the operator chooses not to abide by the recommended COA, then the operator will not be in compliance with WY BLM policy, the State of Wyoming's Greater Sage-Grouse conservation strategy (Executive Order (EO) 2011-5 Greater Sage-grouse Core Area Protection), or the BFO RMP.

With application of Standard Operating Procedures (SOP's), applied recommended mitigation, Required Design Features and Conditions of Approval identified for Greater Sage-Grouse under the proposed action, impacts caused by surface-disturbing and disruptive activities would be minimized.

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. Typically, a timing limitation (May 1 – July 31) would be applied as a condition of approval (COA) for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road). However, due to the BLM's minimal surface jurisdiction, this timing limitation would only be recommended by the BLM in order to reduce the possibility that a violation or "take" may occur as defined by the Migratory Bird Treaty Act (MBTA).

Cousins Fed Com 24TH

Raptors

The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.2.1, p.15-17). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.2.1, pp. 28-31) to raptors from surface disturbing and disruptive activities associated with development of horizontal oil wells. Within 0.5 miles the proposed well pad, 2 Swainson's hawk nests are present. Human presence on the well pad will not be seen from the nests (due to topography). To reduce the risk of decreased productivity or nest failure during breeding and nesting season, BFO would typically implement a timing limitation (February 1 – July 31) within 0.5 mile of an active nest as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and for the associated access road). However, due to the BLM's minimal surface jurisdiction

(per BLM IM No. 2009-078) this timing limitation COA will only be recommended by the BLM in order to reduce the possibility that a violation or “take” may occur as defined by the Migratory Bird Treaty Act (MBTA).

Traffic and construction activities may degrade habitat quality sufficiently to render the area unsuitable for some raptors. Timing limitations do nothing to mitigate habitat loss, therefore drilling and construction that takes place outside of nesting season will still result in habitat loss for this species.

In addition to the federal development, there will be fee development associated with the project that will have similar impacts on raptors as those discussed in the PRB FEIS. Even without federal development, the extent of fee development alone may surpass a threshold that makes the area unsuitable for raptors through avoidance and degradation of habitat quality.

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. Typically, a timing limitation (May 1 – July 31) would be applied as a condition of approval (COA) for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road). However, due to the BLM’s minimal surface jurisdiction (per BLM IM No. 2009-078) , this timing limitation would only be recommended by the BLM in order to reduce the possibility that a violation or “take” may occur as defined by the Migratory Bird Treaty Act (MBTA).

Quill Federal Com 6PH and Quill Federal Com 7PH

Greater Sage-Grouse (GSG)

Nesting GSG habitat exists within the proposal area. The majority of the sagebrush stands have been fragmented by oil and gas development. The proposal is within 2-miles of the occupied Porcupine Creek GSG Lek. The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.4.1, p.18-19). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.4.1, pp. 34-37) to GSG from surface disturbing and disruptive activities associated with development of horizontal oil wells. The BLM IM WY-2012-019 establishes interim management policies for proposed activities on BLM-administered lands, including federal mineral estate, until RMP updates are complete.

Typically, the well pad and associated infrastructure would have a timing limitation applied as a COA to reduce negative impacts to the local GSG population and to be in compliance with WY BLM policy, the State of Wyoming’s Greater Sage-Grouse conservation strategy (Executive Order (EO) 2011-5 Greater Sage-grouse Core Area Protection), and the BFO RMP. However, per IM No. 2009-078, the timing limitation COA is recommended only. If the operator chooses not to abide by the recommended COA, then the operator will not be in compliance with WY BLM policy, the State of Wyoming’s Greater Sage-Grouse conservation strategy (Executive Order (EO) 2011-5 Greater Sage-grouse Core Area Protection), or the BFO RMP.

With application of Standard Operating Procedures (SOP’s), applied recommended mitigation, Required Design Features and Conditions of Approval identified for Greater Sage-Grouse under the proposed action, impacts caused by surface-disturbing and disruptive activities would be minimized.

Raptors

The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference:

Affected Environment (Section 3.7.2.1, p.15-17). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.2.1, pp. 28-31) to raptors from surface disturbing and disruptive activities associated with development of horizontal oil wells. Within 0.5 miles the proposed well pads, three raptor nests are present. Human presence on the well pad will not be seen from the nests (due to topography). To reduce the risk of decreased productivity or nest failure during breeding and nesting season, BFO would typically implement a timing limitation (February 1 – July 31) within 0.5 mile of an active nest as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and for the associated access road). However, due to the BLM’s minimal surface jurisdiction (per BLM IM No. 2009-078) this timing limitation COA will only be recommended by the BLM in order to reduce the possibility that a violation or “take” may occur as defined by the Migratory Bird Treaty Act (MBTA).

Traffic and construction activities may degrade habitat quality sufficiently to render the area unsuitable for some raptors. Timing limitations do nothing to mitigate habitat loss, therefore drilling and construction that takes place outside of nesting season will still result in habitat loss for this species.

In addition to the federal development, there will be fee development associated with the project that will have similar impacts on raptors as those discussed in the PRB FEIS. Even without federal development, the extent of fee development alone may surpass a threshold that makes the area unsuitable for raptors through avoidance and degradation of habitat quality.

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. Typically, a timing limitation (May 1 – July 31) would be applied as a condition of approval (COA) for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road). However, due to the BLM’s minimal surface jurisdiction (per BLM IM No. 2009-078) , this timing limitation would only be recommended by the BLM in order to reduce the possibility that a violation or “take” may occur as defined by the Migratory Bird Treaty Act (MBTA).

Muffin Com 1TH

GSG

Nesting GSG habitat exists within the proposal area. The majority of the sagebrush stands have been fragmented by oil and gas development. The proposal is within 2-miles of the occupied Porcupine Creek GSG Lek. The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.4.1, p.18-19). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.4.1, pp. 34-37) to GSG from surface disturbing and disruptive activities associated with development of horizontal oil wells.

The BLM IM WY-2012-019 establishes interim management policies for proposed activities on BLM-administered lands, including federal mineral estate, until RMP updates are complete. Any GSG that may be using the proposed project area would be affected by disruptive activities associated with construction, drilling, and completions. The well pad (construction of well pad, associated buried pipelines, and the associated access road) will have a timing limitation applied for surface disturbing activities as a COA to reduce negative impacts to the local GSG population. With application of Standard Operating Procedures (SOP’s), applied mitigation, Required Design Features and Conditions of Approval identified for Greater Sage-Grouse under the proposed action, impacts caused by surface-disturbing and disruptive activities would be minimized.

Raptors

The affected environment for this proposal is similar to a recent approved project (Sahara POD) BLM analyzed. Therefore, the Sahara POD EA, WY-070-EA13-72 analysis is incorporated here by reference: Affected Environment (Section 3.7.2.1, p.15-17). Effects (Direct and indirect, Cumulative, Mitigation, and Residual, Section 4.6.2.1, pp. 28-31) to raptors from surface disturbing and disruptive activities associated with development of horizontal oil wells. Within 0.5 miles the proposed well pad, one raptor nest is present. Human presence on the well pad will not be seen from the nest (due to topography). To reduce the risk of decreased productivity or nest failure during breeding and nesting season, BFO will apply a timing limitation (February 1 – July 31) within 0.5 mile of the active nest as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and for the associated access road).

This timing restriction, however, will not apply to completion activities or maintenance actions (for example, work over operations). Traffic and construction activities that are not prohibited by the timing limitations may degrade habitat quality sufficiently to render the area unsuitable for some raptors. Timing limitations do nothing to mitigate habitat loss, therefore drilling and construction that takes place outside of nesting season will still result in habitat loss for this species.

In addition to the federal development, there will be fee development associated with the project that will have similar impacts on raptors as those discussed in the PRB FEIS. Even without federal development, the extent of fee development alone may surpass a threshold that makes the area unsuitable for raptors through avoidance and degradation of habitat quality

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. A timing limitation (May 1 – July 31) will be applied as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road).

Moor Deep 1-Church Com 9TH

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. A timing limitation (May 1 – July 31) will be applied as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road).

Moore Deep 1-Mike Com 8TH

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. A timing limitation (May 1 – July 31) will be applied as a COA for surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road).

Moore Deep 1-Patricia Com 7TH

Migratory Birds

Impacts to migratory birds will be similar to those described in the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.2.2.1, pp. 31-32, incorporated here by reference. Suitable habitat for migratory birds is present throughout the proposal area. A timing limitation (May 1 – July 31) will be applied as a COA for

surface disturbing activities (construction of well pad, associated buried pipelines, and the associated access road).

Cultural.

In accordance with section 106 of the National Historic Preservation Act, BLM must consider impacts to historic properties (sites that are eligible for or listed on the National Register of Historic Places (NRHP)). For an overview of cultural resources that are generally found within BFO the reader is referred to the Draft Cultural Class I Regional Overview, Buffalo Field Office (BLM, 2010). A Class III (intensive) cultural resource inventory (BFO project nos. 70140120, 70140128, 70150016, 70150028) was performed in order to locate specific historic properties which may be impacted by the proposed project. The following resources are located in or near the proposed project area.

Cultural Resources Located In or Near the Project Area

Site Number	Site Type	NRHP Eligibility
48CA1568	Deadwood Trail (Segment 2)	Eligible
48CA5506	Historic Site	Not Eligible
48CA7214	Prehistoric & Historic Site	Not Eligible

The Deadwood Trail (48CA1568) is an eligible historic freight route used between the Black Hills and Bozeman Trail from the late 1870’s through the 1890’s. In 2003 BLM determined that segment 2 of the trail contributes to the eligibility of the site and that it retains an intact setting. The proposed Mike 8TH well is planned within ¼ mile of the well and will be fully visible to the trail as designed. Yates Petroleum is unable to move the location without resulting in other significant resource concerns. The Bureau has determined that approval of the Mike 8TH well within the proposed Moore Deep 1 Master Development Plan will result in an “adverse effect” to 48CA1568. BLM made a formal determination of the adverse effect on 12/22/14 and SHPO concurred with the finding on 1/20/15. Following the State Protocol Between the Wyoming Bureau of Land Management State Director and The Wyoming State Historic Preservation Officer (state protocol), Section V(F)(ii) the BLM, SHPO, Yates Petroleum and other invited parties will draft a memorandum of agreement (MOA) outlining mitigation measures that will resolve the adverse effect. BLM is deferring the decision on the APD for the Mike 8TH well until adequate mitigation is devised and the MOA resolving the adverse effect is signed.

Some of the project area analyzed in this CX3 occurs on deep alluvial deposits. Alluvial deposits typically have a high potential for buried cultural resources, which are nearly impossible to locate during a Class III inventory (Ebert & Kohler 1988:123; Eckerle 2005:43). Buried archeological sites typically preserve artifacts, features and other materials in situ and are often evaluated as significant resources.

BLM policy states that a decision maker’s first choice should be avoidance of historic properties (BLM Manual 8140.06(C)). If historic properties cannot be avoided, mitigation measures must be applied to resolve the adverse effect. Excluding the deferred Mike 8TH location, no historic properties will be impacted by the proposed project. Following the state protocol, Section V(E)(iv) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 12/22/14 and 2/26/15, that no historic properties exist within the area of potential effect (APE) for all wells associated with the project except for the Mike 8TH location. If any cultural values (sites, features or artifacts) are observed during operation, they will be left intact and the Buffalo Field Manager notified. If human remains are noted, the procedures described in Appendix L of the PRB FEIS must be followed. Further discovery procedures are explained in Standard COA (General)(A)(1) and in Appendix K of the Wyoming Protocol.

If any cultural values (sites, features or artifacts) are observed during operation, they will be left intact and the Buffalo Field Manager notified. If human remains are noted, the procedures described in Appendix L of the PRB FEIS must be followed. Further discovery procedures are explained in Standard COA (General)(A)(1) and Appendix K of the Wyoming Protocol.

When a project is constructed in an area with a high potential for buried cultural material, archaeological monitoring is often included as a condition of approval. Construction monitoring is performed by a qualified archeologist working in unison with construction crews. If buried cultural resources are located by the archeologist, construction is halted and the BLM consults with the State Historic Preservation Office (SHPO) about mitigation or avoidance. Due to the presence of alluvial and/or Aeolian deposits identified by the NRCS soil survey (NRCS n.d.), and areas of High to Very High Sensitivity Zones per the PUMP III Model (Eckerle 2005), the operator will be required to have an archeologist monitor all earth moving activities associated with certain construction, as described in the site specific COA's.

List of Preparers: Persons and Agencies Consulted (BFO unless otherwise noted)

Position/Organization	Name	Position/Organization	Name
NRS/Team Lead	Dan Sellers	Archaeologist	Ardeth Hahn/Buck Damone
Supr NRS	Casey Freise	Wildlife Biologist	Scott Jawors
Petroleum Engineer	Will Robbie/Jonathon Shepard	Geologist	Kerry Aggen
LIE	Sharon Soule/Karen Klaahsen	Grazing Management	Dan Sellers
Soils	Dan Sellers	Supr NRS	Bill Ostheimer
Hydrologist	Keith A. Anderson	Assistant Field Manager	Chris Durham
Assistant Field Manager	Clark Bennett	NEPA Coordinator	Tom Bills
WY SHPO	Mary Hopkins	WY SHPO	Joseph Daniele

Decision and Rationale on the Proposal.

The COAs provide mitigation and further the justification for this decision and may not be segregated from project implementation without further NEPA review. I reviewed the plan conformance statement and determined that the proposed project, covered in this CX3 APDs and associated infrastructure conform to the applicable land use plan, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215. I reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 is correct. I determined that there is no requirement for further environmental analysis.

Field Manager: /s/ Duane W. Spencer Date: 4/28/2015

Contact Person, Dan Sellers, Natural Resource Specialist, Buffalo Field Office, 1425 Fort Street, Buffalo WY 82834, 307-684-1100