

DECISION RECORD
Yates Petroleum Corporation, Groves Com. #51H, Starlight Federal #28H, and
Ludington Com. #14H Applications for Permit to Drill (APD)
Categorical Exclusion 3 (CX3), WY-070-390CX3-12-253, WY-070-390CX3-12-254, and
WY-070-390CX3-12-255
Bureau of Land Management, Buffalo Field Office, Wyoming

DECISION: The BLM approves the applications for permit to drill (APDs) from Yates Petroleum Corporation (Yates) to horizontally drill 3 conventional oil wells and construct their associated infrastructure as described in the CX3 worksheet, WY-070-390CX3-12-253 to -255, which BLM incorporates here by reference.

Compliance. This decision complies with:

- 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).
- Buffalo and Powder River Basin (PRB) Final Environmental Impact Statement (FEIS), 1985, 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.

A summary of the details of the approval follows. The CX worksheet, WY-070-390CX3-12-253 to -255, includes the project description, including site-specific mitigation measures which are incorporated by reference into that worksheet from earlier analysis. The proposed wells are approximately 11 miles west of Wright, Campbell County, Wyoming. Yates proposed 3 APDs to develop and produce oil from the formations of the PRB. All wells are horizontal bores proposed on 320 acre spacing pattern with 1 well per location. Each well will produce from the Turner formation.

Approvals: BLM approves the following 3 conventional APDs and associated infrastructure:

#	Well Name/ Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	Groves Com. #51H	NENW	8	43	73	WYW129007	WY-070-390CX3-12-253
2	Starlight Federal #28H	NENW	7	43	73	WYW4064	WY-070-390CX3-12-254
3	Ludington Com. #14H	SWSE	25	44	74	WYW143551	WY-070-390CX3-12-255

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 worksheet process and its limiting parameters. Thus a FONSI and an EIS is not required.

COMMENT OR NEW INFORMATION SUMMARY. Since implementation of this CX3 proposal BFO received a new Greater Sage-Grouse (GSG) policy and population viability analysis. BLM posted these APDs for 30-days and received no public comments on the proposals.

DECISION RATIONALE. The approval of this project is because:

1. Mitigation measures and conditions of approval (COAs), analyzed in the CX3 worksheet, in environmental impact statements or environmental analysis to which the CX3 worksheet tiers or incorporates by reference, will reduce environmental impacts while meeting the project's need.
2. The approved project conditioned by its design features and COAs, will not result in any undue or unnecessary environmental degradation. The impact of this development cumulatively contributes to the potential for local extirpation of the 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 and Wyoming GSG

conservation strategies. There are no conflicts anticipated or demonstrated with current uses in the area. This decision approving the Groves Com. #51H, Starlight Federal #28H, and Ludington Com. #14H APDs complies with the Energy Policy Act of 2005, Section 390, 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215.

3. 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.
4. The selected alternative will help meet the nation's energy need, revenues, and stimulate local economies by maintaining workforces.
5. The operator, in their 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).
 - The operator will collect a water sample representative of the water produced from this well for analysis within 30 to 60 days of initial production.
6. The project is clearly lacking in wilderness characteristics as there is no federal surface.
7. BLM incorporates by reference the portions addressing Reclamation/Dry Hole from SDRs WY-2012-010, WY-2012-009, WY-2012-008, and WY-2011-022.
8. This decision does not foreclose the lessee or operator to propose a new or supplementary plan for developing the federal oil and gas lease(s) 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. Yates certified there is a surface use 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 Master Surface Use Plan of Operations, Drilling Plan, Water Management Plan, and information in 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: *J. [Signature]* Date: 10/19/12

**Categorical Exclusion 3 (CX3), WY-070-390CX3-12-253, WY-070-390CX3-12-254, and
WY-070-390CX3-12-255 - Section 390, Energy Policy Act of 2005
Yates Petroleum Corporation, Groves Com. #51H, Starlight Federal #28H, and
Ludington Com. #14H Applications for Permit to Drill (APD)
Bureau of Land Management, Buffalo Field Office, Wyoming**

Description of the Proposed Action.

Yates Petroleum Corporation (Yates) proposes to horizontally drill 3 conventional oil wells and construct associated infrastructure as follows:

Table 1.1. Proposed Wells

#	Well Name/ Well #	QTR	Sec	TWP	RNG	Lease	CX Number
1	Groves Com. #51H	NENW	8	43	73	WYW129007	WY-070-390CX3-12-253
2	Starlight Federal #28H	NENW	7	43	73	WYW4064	WY-070-390CX3-12-254
3	Ludington Com. #14H	SWSE	25	44	74	WYW143551	WY-070-390CX3-12-255

The proposed horizontal oil wells are respectively within the Groves Com #51H, Starlight Federal #28H and Ludington Com #14H boundaries, which are within 2.5 miles of each other. The wells share similar infrastructure and the project area is approximately 11 miles east of Wright, Campbell County, Wyoming. The proposed surface hole (drill site) locations are shown in Table 1.1. Elevations in the project area range from 4,980 to 5,130 feet above sea level. The topography has gently sloped and shallow draws rising to rolling hills. Vegetation is characterized with mixed sagebrush and grassland uplands. The Belle Fourche River flows south to north, east of the Groves Com. #51H well location. Four Mile Creek flows west to east and is approximately 0.6 miles north of the Ludington Com. #14H well location. No trees are present within the drainages or elsewhere in the project area. The Starlight Federal #28H well is approximately one mile west of the Groves Com. #51H location and the Ludington Com. #14H is approximately 2.5 miles to the northwest. All the wells may be accessed from Clarkelen Road, then on existing routes. The climate in the area is semi-arid, averaging 12.0 inches of precipitation annually, about 71% of which occurs between April and September. The jurisdiction for the well is fee, in part state, surface overlying federal minerals, in part; and the targeted formation for extraction is, in parts, federal and fee leases, see Figure 1.1 and the individual APDs. Current land uses in the area are grazing, coalbed natural gas (CBNG) and conventional oil and gas development.

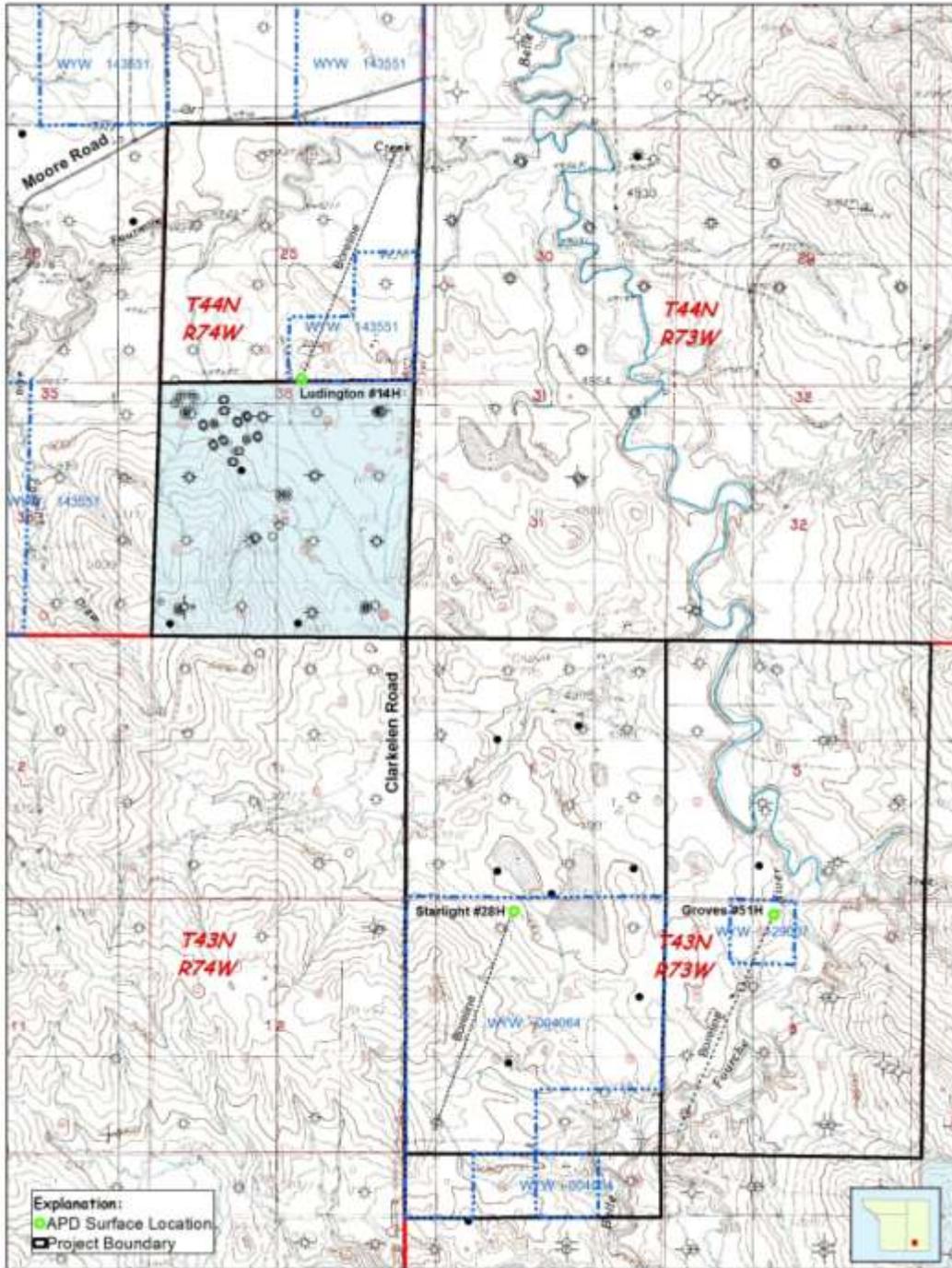
The BLM will decide whether or not to approve the proposed development, and if so, under what terms and conditions agreeing with the Bureau's multiple use mandate, environmental protection, and RMP. Reasonably foreseeable development in the Sunrise Federal #32H EA, WY-070-EA11-287, 2011) and its locality to include but not limited to the approved Groves Com. #51H, Starlight Federal #28H, and Ludington Com. #14H analysis areas, will fill-in to 80-acre spacing. This supports the development anticipated in the PRB FEIS, (see narrative in Section 2, No Action Alternative).

Yates submitted the APDs on January 25, 2012 (Groves Com. #51H), March 5, 2012 (Starlight Federal #28H), and March 9, 2012 (Ludington Com. #14H). Yates and BFO completed onsite evaluations on April 18, May 18, and July 24, 2012. The onsites evaluated the proposal and modified it to mitigate environmental impacts. Additional correspondence concluded on October 15, 2012. BLM incorporates the APDs here by reference.

Full effects of the action and recommended mitigation measures are in the Groves Com. #51H, WY-070-390CX3-12-253; Starlight Federal #28H, WY-070-390CX3-12-254 and Ludington Com. #14H, WY-070-390CX3-12-255 Surface Use Plans, and BLM Conditions of Approval (COAs) for Conventional Application for Permit to Drill, Appendix A.

The proposal is to explore by horizontal drilling for, and possibly develop, oil reserves in the Turner Formation. The total vertical distances (TVD) are as follows for the proposed APDs: Groves Com. #51H at 10,425 feet, Starlight Federal #28H at 10,605 feet, Ludington Com. #14H at 10,489 feet. As shown in Figure 1.1 below, the surface hole location is on private surface over federal oil and gas mineral estate in federal lease WYW129007, WYW4064, and WYW143551, respectively.

Figure 1.1. Top Hole Locations (Green) in Lease WYW129007, WYW4064, and WYW143551



Surface owners: James and Edra Drake, Bernice Groves, Barbara Lee Baker, and State of Wyoming grazing lessee; Lease No. 2-4001.

Drilling, Construction, and Production design features include:

- Yates 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 completion will be 90 days.
- Hydraulic fracturing will be used to complete the wells. The potential permitted water sources for drilling and completion of these wells are identified in the individual APD Surface Use Plans and Attachments. Water transport to the individual locations will be via water tanker truck or a temporary surface water line. The operator estimates that a total of 40,000 barrels of water, per well, will be used for drilling and completion purposes. The water will be stored on location in the drilling pit and temporary tanks. Flow back water from the completion phase of either of these wells may be disposed in one of two permitted disposal wells: Groves #42, located in Section 8 T43N R73W or Holler #1-11 located in Section 11 T52N R72W.
- A road network that will consist of existing roads to access the well locations. Approximately 2,000 feet (1,600 feet existing and 400 feet new) will be improved to access the Groves Com. #51H location and approximately 480 feet of proposed crowned and ditched (C&D) road will be constructed to access the Starlight Federal #28H location. There is approximately 0.8 mile (4,224 feet) of existing improved road that will be upgraded to C&D status and surfaced with an additional 450 feet of C&D road needed to access the Ludington Com. #14H location.
- There will be a reserve pit(s) at the Starlight Federal #28H and Ludington Com. #14H oil well locations during drilling and completion. The lined reserve pit for the Groves Com. #51H will be located off site, to the west of the drilling location to adhere to setback distance from the Belle Fourche River.
- No off-site ancillary facilities are planned for these APDs. 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 pad during the drilling and completion of the well.
- If the well(s) 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 this producing oil well location.
- Dikes will be constructed completely around production facilities, i.e. production tanks, water tanks, and heater treater. The dikes will be constructed of corrugated steel, approximately 3 feet high, and hold capacity of the largest tank plus 10%.
- An existing above ground powerline will be utilized if the well(s) become a producer. A single power drop is proposed for the Groves Com. #51H location. Power will be buried and tied into existing infrastructure for the Starlight Federal #28H and Ludington Com. #14H locations.

Individual well designs are in the individual APDs. Their construction footprint is quickly followed with interim reclamation. The proposed size is necessary to safely accommodate the equipment necessary for an effective well completion.

For a detailed description of design features and construction practices associated with the proposed project, refer to the individual surface use plan's (SUPs) and drilling plan(s) included with the APDs. Also see the subject APDs for maps showing the proposed well location and associated facilities described above. Total surface disturbance for the individual well locations are shown in Table(s) 1.2a, 1.2b and 1.2c below. The proposed surface disturbances found in Tables 1.2a-c, below are generally well within the analysis parameter in the PRB FEIS, p. 4-312, etc. BLM considers in the analysis here that the wells are exploratory; so if they do not produce Yates will reclaim all surface disturbances. Second, it is

general industry practice to drill multiple wells from 1 pad so that practice, if the initial well produces, and an operator drills another from the pad this reduces the surface disturbance per well. Third, BLM considers the cost of \$7-10 million per well so reasonable economics dictate that operators will not drill design or drill multiple wells from 1 pad without having a proven producer. Fourth, BLM considers the interim reclamation in the analysis that drives down the surface disturbance. The PRB FEIS parameter is that 82% of the surface disturbance is long term. (It is the BLM's PRB experience that operators routinely provide more interim reclamation.) Below in the case with the most surface disturbance, BLM projects 12.2 acres of surface disturbance. Applying the standard interim reclamation leaves an estimated 10 acres of disturbed surface. If, as is the industry practice, the well produces and later another APD or APDs are proposed from the pad – the surface disturbance falls well within the analysis parameter in the PRB FEIS.

Table 1.2a. Disturbance Summary Groves Com #51H:

Facility	Number or Miles	Factor	Disturbance
Engineered Pad	1	400 ft x 400 ft	3.7 acres
Production Pad	1	250 ft x 250 ft	1.4 acres
Improved Road Upgrade (existing)	1,600 ft	75 ft	2.8 acres
Improved Road Upgrade (proposed)	400 ft	75 ft	0.7 acres
Off-site Drill Pit	1	120 ft x 150 ft	0.5 acres
Proposed Power Drop	1	0.01	0.01
Total Surface Disturbance			7.7 acres

Table 1.2b. Disturbance Summary Starlight Federal #28H:

Facility	Number or Miles	Factor	Disturbance
Engineered Pad	1	400 ft x 400 ft	3.7 acres
Production Pad	1	250 ft x 250 ft	1.4 acres
Improved Road Upgrade (existing)	N/A		
Improved Road Upgrade (proposed)	480 ft	60 ft	0.7 acres
Proposed Power Drop	N/A	N/A	N/A
Total Surface Disturbance			4.4 acres

Table 1.2c. Disturbance Summary Ludington Com #14H:

Facility	Number or Miles	Factor	Disturbance
Engineered Pad	1	400 ft x 400 ft	3.7 acres
Production Pad	1	250 ft x 250 ft	1.4 acres
Improved Road Upgrade (existing)	4,400 ft	75 ft	7.6 acres
Improved Road Upgrade (proposed)	450 ft	75 ft	0.8 acres
Proposed Buried Electric (corridor)	2,300 ft	25 ft	1.3 acres
Proposed Buried Electric (not corridor)	200 ft	25 ft	0.1 acres
Proposed Power Drop	N/A	N/A	N/A
Total Surface Disturbance			12.2 acres

Off Well Pad

Yates proposes to bury power to off well pad locations to tie into existing fee facilities adjacent to the Starlight Federal #28H and Ludington Com. #14H wells. The reserve pit used in drilling for the Groves Com. #51H well will be off the well pad to comply with setback distances required from the Belle Fourche River. Yates will also use overland water lines to existing hydraulic fracturing pit locations mentioned above.

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 CX worksheet 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 proposal conforms with the terms and conditions of the approved Resource Management Plan (RMP) for the public lands administered by the BLM, BFO, 1985, the PRB FEIS, 2003, and the Record of Decision (ROD) and Resource Management Amendments for the Powder River Oil and Gas Project, Amendments of 2001, 2011 as required by 43 CFR 1610.5, 40 CFR 1508.4, and 43 CFR 46.215. The Groves Com. #51H, Starlight #25H, and Ludington Com #14H locations are clearly lacking in wilderness characteristics as there is no federal surface. BLM finds that the conditions and environmental effects found in the senior EA 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/approved PODs that are within or adjacent to the Groves Com. #51H, Starlight Federal #25H, and Ludington Com. #14H project area. This information shows the reader that BLM conducted analysis.

Table 1.3. Adjacent or Overlapping Oil & Gas Well POD Analysis by Decision Date

#	POD Name	NEPA Document	Well Type / #	Approval
	Yates: Starlight Federal 29	WY-070-DNA12-204	Oil/ 1	9/21/2012
	Devon: Valerie	WY-070-EA12-68	Oil/ 9	3/1/2012
	Yates: Sunrise Federal 32	WY-070-EA11-287	Oil/ 1	8/12/2011
	Devon: House Creek Sandy	WY-070-EA11-144	Oil/ 5	2/11/2011
	Yates: Boris Federal 5	WY-070-EA10-45	Oil/ 1	11/12/2009
	Yates: All Day	WY-070-EA08-026	CBNG/ 35	8/28/2009

- 2) There is an existing NEPA document (and the RMP) containing reasonably foreseeable development scenario for this action. There are several existing NEPA documents that reasonably foresaw development to spud additional wells to fill in 80 acre well-spacing. BLM reviewed these documents and determined they considered the potential environmental effects associated with the proposed activity at a site specific level. In addition, all approved EAs tier into the PRB FEIS. The PRB EIS analyzed foreseeable development in the PRB. The PRB foreseeable development included 3,200 oil wells and drilling CBNG wells on 80 acre-spacing resulting in about 51,000 CBNG wells and over 3,000 oil wells. The Groves Com. #51H, Starlight Federal #25H and Ludington Com. #14H wells are in the foreseeable development scenario of 80 acre well-spacing that was analyzed in EAs in Table 1.3 above and in the PRB FEIS's Appendix A.
- 3) The tiered NEPA document was finalized or supplemented within 5 years of spudding (drilling) the proposed well.

The Groves Com. #51H, Starlight Federal #25H, and Ludington Com. #14H CX3 tiers to the following approved EAs listed below in Table 1.4.

Table 1.4. NEPA Document Finalized Within Anticipated Spud Date

#	POD Name	NEPA Document #	# / Type Wells	Decision Date
1	Devon: Valerie	WY-070-EA12-68	Oil/ 9	3/1/2012
2	Yates: Boris Federal 5	WY-070-EA10-45	Oil/ 1	11/12/2009

This Project Tiers to or Incorporates by Reference these NEPA Documents in Addition to the Buffalo FEIS, PRB FEIS and the hydraulic fracturing analysis is Samson's Hornbuckle, WY-060- EA11-181, 2011.

In summary the EAs in Tables 1.3 and 1.4 analyzed in detail the anticipated direct, indirect, residual, and cumulative effects that would result from the approval of these APDs and associated support structure in these proposed well(s) is similar to both the qualitative and quantitative analysis in the above mentioned EAs. The BFO reviewed the EA and found that the EA considered potential environmental effects associated with the proposal at a site specific level. The confirmation well in the Valerie POD was drilled as well as the Boris Federal #5. The APD's 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.

Plan of Operations.

The proposal conforms 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. This CX3 worksheet also incorporates and analyzes 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.

Wildlife.

A BLM wildlife biologist reviewed the proposed APDs. The wildlife biologist determined that the proposed APDs, 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), which is an update from the PRB FEIS, Appendix K. The biologist performed onsite visits to the project area on April 18, May 18, and July 24, 2012. The proposed wells and infrastructure incorporates recommendations provided to the BLM by the U.S. Fish and Wildlife Service. The affected environment and environmental consequences for wildlife are discussed in, and anticipated to be similar to, the Valerie POD EA, (WY-070-EA12-68).

Raptors

Effects to raptors were analyzed in the PODs listed in Table 1.3. Timing limitations were added to the POD as conditions of approval for both general raptors, and specifically for ferruginous hawks.

Greater Sage-Grouse (GSG)

Effects to GSG were analyzed in the PODs listed in Table 1.3. The BLM typically applies a controlled surface use buffer of 0.25 miles for GSG leks. The proposed Ludington Com. #14H well is approximately 0.8 miles from the Winland Lek which is classified by the WDGF as "Unoccupied". The Starlight Federal #28H well is approximately 1.6 miles from the Winland Lek. There are no occupied GSG leks within 2 miles of the wells proposed in this project. Sagebrush habitat in the project area is scattered and sparse.

In March, 2012, WY BLM released the report, "Viability analyses for conservation of sage-grouse populations: Buffalo Field Office, Wyoming," indicating that a viable population of GSG remains in the PRB, but the combined impacts of multiple stressors, including West Nile virus (WNV) and energy development, threaten that viability (Taylor et al 2012). The report identified that the effects of energy development are detectable at a larger spatial scale than analyzed in the documents listed in Table 1.3, above. Additional information regarding the population viability analysis, and its influence on cumulative

effects from energy development is found in the affected environment and environmental effects sections (Section 3.7.12 and 4.8.2 – Candidate Species – Greater Sage-grouse (Sage-grouse) of the Mufasa Fed 11-31H Well EA, WY-070-EA12-062, incorporated here by reference. Given that the Project is a not within 2 miles of any occupied leks, and is adjacent to a previously approved wells, this new information does not substantially change the analysis included in the PODs in Table 1.3.

Water Resources.

The historical use for groundwater in this area was for stock water purposes. A search of the WSEO Ground Water Rights Database showed 10 registered stock water wells within 1 mile of the proposed wells in the project area with depths ranging from 30 to 1073 feet. For additional information on groundwater, refer to the PRB FEIS, pp. 3-1 to 3-36.

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 fresh water aquifers above the drilling target zone. Compliance with the drilling and completion plans and Onshore Oil and Gas Orders Nos. 2 and 7 ensures there is no adverse impact on ground water. The drilling plan identifies that any shallow water zones will be adequately protected and reported. The operator also proposed to cement casing across the Fox Hills formation at a depth of approximately 6,325 feet, 6,495 feet, and 6,360 feet for the Groves Com. #51H, Starlight Federal #28H and Ludington Com. #14H locations, respectively. These measures will ensure groundwater protection from wellbore activities.

The volume of water produced by this federal mineral development is unknowable at the time of permitting. Yates will have to produce the well for a time to be able to estimate the volume and quantity of water production. To comply with Onshore Order Oil and Gas Order No. 7 Disposal of Produced Water, Yates will submit a Sundry to the BLM within 90 days of first production which includes a representative water analysis and the final proposal for water management. The quality of water produced in association with conventional oil and gas historically was such that surface discharge would not be possible without treatment. Initial water production is quite low in most cases. There are 3 common alternatives for water management: re-injection, deep disposal, or disposal into pits. All alternatives would be protective of groundwater when performed in compliance with state and federal regulations.

As part of the completion process for this well, Yates may choose to acid stimulate or hydraulically fracture the formation to promote oil production. Water from identified sources will be used for the stimulation. The procedures will be isolated from shallow zones to focus the process energy in the productive formation. Flow back or return water will be transported off site and disposed at a permitted disposal facility. The WOGCC monitors and regulate the chemicals for drilling and completion.

The operator included in their MSUP the possibility of installing a production or emergency pit when the well site facilities are installed. Due to issues of potential groundwater contamination from produced water infiltration and hazard to wildlife if oil is present in the pit, BLM recommends to all operators that existing pits be reclaimed and replaced with enclosed above ground receptacles. The pit installation proposal included in the MSUP does not provide adequate information for environmental analysis. Yates will be required to submit a Sundry notice for water disposal which would include additional information regarding the installation of a production or emergency pit, as specified in Onshore Oil and Gas Order No. 7 Disposal of Produced Water.

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. There are three common alternatives for water management: Re-injection, deep disposal or disposal

into pits. All alternatives would be protective of groundwater resources when performed in compliance with state and federal regulations.

Cultural

Class III cultural resource inventories were performed for the Groves Com. #51H, Starlight Federal #28H, and Ludington Com. #14H wells prior to on-the-ground project work (BFO project no. 70120022 and 70120025). Class III cultural resource inventories following the Archeology and Historic Preservation, Secretary of the Interior's Standards and Guidelines (48CFR190) and the *Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class II and III Reports* were provided to BFO by Yates (operator). Seth Lambert, BLM Archaeologist, reviewed the reports for technical adequacy and compliance with BLM standards, and determined them to be adequate. The following resources are located in or near the project area.

Site Number	Site Type	Eligibility
48CA3482	Prehistoric	NE
48CA4129	Prehistoric	NE
48CA4133	Prehistoric	UN
48CA4795	Historic	E
48CA7074	Prehistoric	E

There are no eligible sites in the area of potential effect (APE) of the proposed project. Following the Wyoming State Protocol Section VI(A)(1) the BLM electronically notified the Wyoming State Historic Preservation Officer (SHPO) on October 1, 2012 that no historic properties exist in the APE.

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

Position/Organization	Name	Position/Organization	Name
NRS/Team Lead	Ray Stott	Archaeologist	Seth Lambert
Supr NRS	Casey Freese	Wildlife Biologist	Don Brewer
Petroleum Engineer	Matt Warren	Geologist	Mike Garrett
LIE	Kristine Phillips	NEPA Coordinator	John Kelley
Associate Field Manager	Chris Durham	Associate Field Manager	Clark Bennett

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 Groves Com. #51H, Starlight Federal #28H and Ludington Com. #14H CX3, APD's and 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

10/19/12

 Signature Date