

DECISION RECORD
Categorical Exclusion 3 (CX3), WY-070-390CX3-15-21 thru 24
Section 390, Energy Policy Act of 2005
Sheridan Production Co., LLC, SLPU Add 3 POD,
SLPU FED 11-13H, SLPU FED 23-13H; SLPU Fed 13-14H;
and SLPU Fed 21-24H
Bureau of Land Management, Buffalo Field Office, Wyoming

DECISION. The BLM approves the applications for permit to drill (APDs) from Sheridan Production Co., LLC (Sheridan) to drill 4 horizontal oil and gas wells and construct the access road and infrastructure as described in the Categorical Exclusion #3 (CX3), WY-070-390CX3-15-21 thru 24, all incorporated 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).
- Powder River Basin Oil and Gas Project Final Environmental Impact Statement (FEIS), 2003.
- Buffalo Resource Management Plan (RMP) 1985, Amendments 2001, 2003, 2011.

Consultation. This decision considered:

- BLM Washington Office Instruction Memorandum No. 2009-078, Processing Oil and Gas Application for Permit to Drill for Directional Drilling into Federal Mineral Estate from Multiple-Well Pads on Non-Federal Surface and Mineral Locations, 2009.
- Wyoming BLM State Director Review, SDR No. WY-2011-010, EOG Resources, Inc. v. Pinedale Field Office, 2011.

A summary of the details of the approval follows. The CX analysis for the 4 oil and gas wells includes the project description, and site-specific mitigation measures which are incorporated by reference in this CX from earlier analysis. The proposed wells are 34 miles southwest of Gillette, Wyoming. Sheridan Production’s proposed 4 APDs will produce oil and gas from the Parkman Formation of the Powder River Basin (PRB).

Approvals: BLM approves 4 APDs and associated infrastructure (SH – surface hole):

#	Well Name	Well #	QTR/Lot	Sec	TWP	RNG	SH Lease #	CX3 #
1	SLPU FED	11-13H	NWNW	13	46N	75W	WYW0325487	WY-070-390CX3-15-21
2	SLPU FED	23-13H	NESW	13	46N	75W	WYW0325487	WY-070-390CX3-15-22
3	SLPU FED	13-14H	NWSW	14	46N	75W	WYW39180	WY-070-390CX3-15-23
4	SLPU FED	21-24H	NENW	24	46N	75W	Fee	WY-070-390CX3-15-24

Limitations. See conditions of approval (COAs) and recommended mitigation measures (RMMs).

THE FINDING OF NO SIGNIFICANT IMPACT (FONSI). The analysis in Categorical Exclusion #3 (CX3), WY-070-390CX3-15-21 thru 24 found no significant impact to the human environment and BLM incorporates by reference here that FONSI. Thus an EIS is not required.

Summary of New Information. BLM posted the APDs for 30 days and received no public comments. Since BLM received the APDs it has not received new policies appropriate to this proposal.

DECISION RATIONALE. The approval of this project is because:

1. Mitigation measures and COAs analyzed in environmental impact statements, or environmental analysis which are incorporated by reference, will reduce environmental impacts while meeting the BLM's need.
2. The approved project conditioned by its design features and COAs, will not result in any undue or unnecessary environmental degradation. The PRB FEIS analyzed and predicted that the PRB oil and gas development would have significant impacts to the region's greater sage-grouse (GSG) population. The impact of this development cumulatively contributes to the potential for local GSG extirpation; 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 these 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 the 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 APDs, 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 APDs (PRB FEIS ROD, p. 7).
6. The project is clearly lacking in wilderness characteristics as it lacks federal surface.
7. 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.
8. Sheridan certified it has a surface access agreement with the landowners or it posted a bond.
9. Sheridan provided the BLM a true and complete copy of a document in which the owner of the surface authorizes the operator to drill a federal well from non-federal lands, and in which the surface owner or representative guarantees the Department of the Interior, including BLM, access to the non-federal lands to perform all necessary surveys and inspections. (See clarification in BLM Instruction Memorandum No. 2009-078, p. 2, para 6). This applies only to APD: SLPU FED 21-24H.
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 and drilling plan information in the individual APD.

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: 1/14/15

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-21 thru 24
Section 390, Energy Policy Act of 2005
Sheridan Production Co., LLC, SLPU Add 3 POD,
SLPU FED 11-13H, SLPU FED 23-13H; SLPU Fed 13-14H;
and SLPU Fed 21-24H
Applications for Permit to Drill (APDs)
Bureau of Land Management, Buffalo Field Office, Wyoming

Description of the Proposed Action.

Sheridan Production Co., LLC (Sheridan) requests BLM’s approval for 4 applications for permit to drill (APDs). Sheridan proposes to drill the horizontal oil and gas wells and construct associated infrastructure at the locations in Table 1.1.

Table 1.1. Proposed Well (Surface Hole Location)

#	Well Name	Well #	QTR/Lot	Sec	TWP	RNG	SH Lease #	CX3 #
1	SLPU FED	11-13H	NWNW	13	46N	75W	WYW0325487	WY-070-390CX3-15-21
2	SLPU FED	23-13H	NESW	13	46N	75W	WYW0325487	WY-070-390CX3-15-22
3	SLPU FED	13-14H	NWSW	14	46N	75W	WYW39180	WY-070-390CX3-15-23
4	SLPU FED	21-24H	NENW	24	46N	75W	Fee	WY-070-390CX3-15-24

The proposal is to explore for, and possibly develop oil and gas reserves in the Lower Parkman formation at an average depth of 7,545 feet of total vertical depth. The laterals are various lengths and directions; see APD for specifics. The project area is 34 miles south of Gillette, Campbell County, Wyoming.

The jurisdiction for SLPU Fed 11-13H, SLPU Fed 23-13H, and SLPU Fed 13-14H is fee surface with underlying Federal minerals; the lateral producing from Federal minerals. The jurisdiction SLPU Fed 21-24H is fee surface with underlying fee minerals; the lateral producing from Federal minerals. BLM consults 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* for processing applied to the SLPU Fed 21-24H APD. Appendix B contains required Conditions of Approval (COAs), and Appendix C contains Recommended Conditions of Approval (COAs), for SLPU Fed 21-24H, as instructed in IM No. 2009-078. The fluid mineral leasing programs fall under the authority of the Mineral Leasing Act, the Federal Land Policy Management Act (FLPMA), and other laws and regulations.

Project area elevations average 5,061 feet above sea level. The area consists of flat to gentle rolling topography with small ephemeral drainages. The climate is semi-arid, averaging 10-14 inches of precipitation annually, about 60% of which occurs between April and September. The SLPU Add 3 POD wells and infrastructure are all located on private surface. Livestock grazing is the primary historic land use. There is existing conventional oil and coalbed natural gas (CBNG) development in and adjacent to the project area. Oil and gas development became the predominant land use in recent years. The proposed wells are in the Savageton Lower Parkman Oil & Gas Unit WYW177255X, which includes 28,330 acres of existing and proposed oil and gas development. A network of existing roads within the project area will be used to access wells in the SLPU Add 3 POD. These roads were constructed or improved to accommodate the existing CBNG development.

Sheridan submitted APDs on September 2, 2014, to the BFO. Sheridan and BFO completed onsite evaluations on May 6, 2014, on Notices of Staking (NOSs) which were received on January 22, 2014. The onsites evaluated the proposal and modified it to mitigate environmental impacts. The BLM sent a Post-onsite deficiency letter to Sheridan on July 23, 2014. Revisions were received from Sheridan Production on November 17, 2014.

Drilling, Construction & Production design features include:

- Sheridan 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 conditions of approval (COAs) and/or agreements with surface owners may impose longer temporal restrictions.
- A road network consisting of existing improved roads and proposed improved roads.
- 150kW generators will supply temporary power to the pumping unit and lease control equipment. Gas produced from the well will be used and/or propane trucked to the location for the generator. Generators will be removed once power lines have been installed to individual well locations, if power is required. Overhead power has not been proposed. There is existing overhead power in close proximity to individual well locations
- Construction of 4 engineered drilling pads, access roads, and buried pipelines accounting for a total of 26.67 acres of disturbance for the proposed project (4 wells and infrastructure) during the construction and drilling phases; reduced to 12.31 acres of disturbance during the operational phase.
- Buried pipelines as depicted in Surface Use Plans.
- Sheridan will not use Hydraulic Fracturing in completion of these wells.
- Approximately 10,000 bbls of water will be used for the drilling and completion of SLPU Add 3 wells. The water source will be municipal water from the city of Gillette, which will be hauled by truck to the well sites and stored in tanks
- A wheel trencher used to construct the pipeline right-of-way. Initial disturbance will be 20 feet wide; after interim reclamation, disturbance width will be 10 feet wide.
- Sheridan certified that all affected landowners within ½ mile have been offered a water well agreement.

For a detailed description of design features and construction practices associated with this proposal, refer to the surface use plan (SUP) and drilling plan included with the APD. Also see the subject APD for maps showing the proposed well location and associated facilities described above. Total surface disturbance for the proposed action is 26.67 acres. Once the wells are completed, any area of the well pad not needed for operations will be reclaimed for interim reclamation (long term disturbance).

Table 1.2. Disturbance Summary SLPU Add 3 POD:

Facility	Construction Disturbance (Short Term)	Interim Disturbance (Long Term)
Number of Well Pads	4	4
Engineered Pads with fill slopes, topsoil, spoils	14.11 acres	1.42 acres
Proposed Template Roads	6.84 acres	6.84 acres
Proposed Pipelines	5.72 acres	4.05 acres
Overhead Power (none proposed)	Existing adjacent	Existing adjacent
Total Acre Disturbance	26.67 Acres	12.31 Acres

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 analysis is NEPA compliance that is 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, and Amendments of 2001, 2003, 2011, and the PRB FEIS, 2003 Record of Decision (ROD) as required by 43 CFR 1610.5, 40 CFR 1508.4, and 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). The proposed wells are in the Savageton Lower Parkman Oil & Gas Unit WYW177255X, which includes 28,330 acres of existing and proposed oil and gas development.

The proposed SLPU Add 3 POD is inside, immediately adjacent to or in the 4 mile analysis area of the recent NEPA analysis in Table 1.3, which include an area of approximately 19,840 acres. This information shows the reader that BLM conducted an analysis.

Table 1.3.* Overlapping NEPA Analyses Tiered & Incorporated by Reference

POD / Well Name	Operator	NEPA Analyses #	#/Type Well	# Drilled	Decision Date
SLPU Add 2 POD	Sheridan Production	WY-070-EA14-216	4/ Oil	1 Oil	6/25/2014

See also: SDR WY-2013-005, particularly noting pp. 2-3, incorporating the entirety here by reference.

*Approved within 5 years and in the 4 miles analysis area of the SLPU Add 4 POD (as of 10/7/2014).

- 2) The tiered NEPA documents were finalized within 5 years of spudding (drilling) the proposed well. The SLPU Add 3 POD CX3 tiers to the NEPA analysis listed in Table 1.3.

In summary, the analyses in Tables 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 in SLPU Add 3 POD is similar to both the qualitative and quantitative analysis in the above tiered-to and incorporated NEPA analysis. The BLM reviewed the analysis and found that the analysis considered potential environmental effects associated with the proposal at a site specific level. The SLPU Add 3 POD 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. The proposal's acres of surface disturbances are within the analysis parameters of the PRB FEIS.

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 analysis 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, Appendices A, B and C.

Traffic, light and heavy duty trucks, will increase with approval of the wells. During the construction and drilling phase, Sheridan estimates 5-15 heavy duty and light duty trucks per day. During the operation phase, Sheridan estimates up to 2 light duty trucks per day for well operational activities.

Wildlife

A BLM wildlife biologist reviewed the proposed APDs and determined that they, combined with the COAs and design features, are: (1) consistent with the PRB FEIS, the Buffalo RMP and the above tiered NEPA analysis; and (2) consistent with the programmatic biological opinion (ES-6-WY-02-F006), from the PRB FEIS, Appendix K. The affected environment and environmental effects for wildlife are discussed in, and anticipated to be similar to, the SLPU Add 2 POD, (WY-070-EA14-216), 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). Additional information is discussed below.

Land uses and other disturbances occurring within the proposed project include wildlife habitat, livestock grazing, ranching, dryland agriculture, overhead power lines, conventional oil and gas, and improved and unimproved roads. Except for the proposed SLPU FED13-14H well, 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). The SLPU FED13-14H location is dry non-irrigated farmland.

The proposed SLPU FED 21-24H is located on fee surface above non-federal minerals. The lateral portion of the well will drain federal minerals (WYW0325487). Therefore, BLM’s Instruction Memorandum 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 proposed 21-24H well (COA’s are only recommended).

Migratory Birds

During the onsite, the BLM biologist identified suitable nesting habitat present for several BLM sensitive sagebrush obligates. Construction for all of the well pads (except for the SLPU FED13-14H well pad) within the proposal and associated infrastructure will remove habitat and could kill BLM sensitive migratory birds, or destroy eggs, if the habitat is removed during the nesting season. To reduce the likelihood of a “take” under the MBTA, the BLM biologist recommended that pad construction (vegetation removal) occur outside of the breeding season (May 1- July 31) for the SLPU FED 21-24H well pad, located on private surface over non-federal minerals, and associated infrastructure. The BLM will apply a timing restriction for the SLPU FED 23-13H and SLPU FED 11-13H wells located on federal mineral leases. This restriction would apply to habitat removal, unless a pre-construction nest search (within approximately 10 days of construction planned May 1-July 31) is completed. If surveys will be conducted, the operator will follow the “2012 Sage-brush BLM Sensitive Migratory Bird Nest Protocol” found at the following web address:

http://www.blm.gov/wy/st/en/field_offices/Bufalo/wildlife.html

Water Resources

The historical use for groundwater in this area was for stock water. A search of the WSEO Ground Water Rights Database showed 7 registered stock water wells within 1/2 mile of the proposed well in the project area with depths ranging from 330 to 712 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 any fresh water aquifers above the target zone. This will ensure that ground water will not be adversely impacted by well drilling and completion. The operator will run surface casing to 1,700 feet, total vertical depth to protect shallow aquifers.

Table 1.4. Casing Set and Cementing Depths in relation to the Fox Hills

Well Name/ Well #	Total Depth of Surface Casing (ft.)	Total Depth of Intermediate Casing (ft.)	Depth to Fox Hills (ft.)
SLPU FED 11-13H	1,700	7,079	6,536
SLPU FED 23-13H	1,700	7,022	6,459
SLPU FED 13-14H	1,700	6,971	6,414
SLPU FED 21-24H	1,700	6,991	6,402

The Fox Hills, the deepest penetrated fresh water zone in the PRB lies well above the target formation. Table 1.4., shows the depth where casing will be set and cemented in place. The operator will verify that there is competent cement across the zone, from 100 feet above to 100 feet below the Fox Hills formation. 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 well 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.

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

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 no. 70150006) 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
48CA7211	Historic Habitation Site	Not Eligible

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. No historic properties will be impacted by the proposed project. Following the *State Protocol Between the Wyoming Bureau of Land Management State Director and The Wyoming State Historic Preservation Officer*, Section V(D)(i) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 1/9/2015 that no historic properties exist within the area of potential effect (APE). 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).

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

Position/Organization	Name	Position/Organization	Name
NRS/Team Lead	Debby Green	Archaeologist	Clint Crago
Supervisory NRS	Casey Freise	Wildlife Biologist	Scott Jawors
Petroleum Engineer	Will Robbie	Geologist	Kerry Aggen
LIE	Karen Klaausen	NEPA Coordinator	Tom Bills

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 SLPU Add 3 POD CX3 APDs 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: _____ /s/ Duane W. Spencer _____

Date: _____ 1/14/15 _____

Contact Person, Debby Green, Natural Resource Specialist, Buffalo Field Office, 1425 Fort Street, Buffalo WY 82834, 307-684-1100.

Reference

Taylor, R. L., D. E. Naugle, L. S. Mills. 2012. Viability analyses for conservation of sage-grouse populations: Buffalo Field Office, Wyoming. Final Report. February 27, 2012. University of Montana, Missoula, MT.