

DECISION RECORD

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 and 140

**Section 390, Energy Policy Act of 2005, Applications for Permit to Drill (APDs)
Peak Powder River Resources, LLC, Dry Fork Federal 1 Plan of Development (POD)
Bureau of Land Management, Buffalo Field Office, Wyoming**

DECISION. The BLM approves 16 applications for permit to drill (APDs), four well pads, entrance roads, and infrastructure, and an existing improved access road right-of-way as described in the consolidated Categorical Exclusion 3 (CX3), WY-070-390CX3-15-125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 and 140 incorporated here by reference.

Compliance. This decision complies with or supports:

- Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701).
- 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.

A summary of the details of the approval follows. The CX3 for the oil and gas wells, above, includes the project description, and site-specific mitigation measures which are incorporated by reference into this CX3 from earlier analysis. The project area is 28 miles West of Wright, Campbell County, Wyoming. Peak’s proposal has 16 APDs with 4 associated pads, access roads and infrastructure, to develop and produce oil and gas from the Mowery, Niobrara, Parkman, and Turner Formations. The wells are horizontal bores proposed on a 640 acre spacing pattern (Docket #'s: 220-2014/232-14 and 219-2014/232-14).

Approvals. BLM approves the following 16 APDs, associated infrastructure:

#	Well Name	Well No.	Qtr	Sec	Twp	Rng	Surface Hole Lease	Lateral Hole Lease	Bottom Hole Lease
1	DRY FORK FED	2-19H	NENW	19	43N	76W	Federal	Federal/Fee	Fee
2	DRY FORK FED	2-19MH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
3	DRY FORK FED	2-19NH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
4	DRY FORK FED	2-19TH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
5	DRY FORK FED	1-23H	NENW	23	43N	77W	Federal	Federal	Federal
6	DRY FORK FED	1-23MH	NENW	23	43N	77W	Federal	Federal	Federal
7	DRY FORK FED	1-23NH	NENW	23	43N	77W	Federal	Federal	Federal
8	DRY FORK FED	1-23TH	NENW	23	43N	77W	Federal	Federal	Federal
9	DRY FORK FED	2-23H	NENE	23	43N	77W	Fee	Fee/Federal	Federal
10	DRY FORK FED	2-23MH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
11	DRY FORK FED	2-23NH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
12	DRY FORK FED	2-23TH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
13	DRY FORK FED	2-24H	NWNW	24	43N	77W	Federal	Federal/Fee	Fee
14	DRY FORK FED	2-24MH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee
15	DRY FORK FED	2-24NH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee

#	Well Name	Well No.	Qtr	Sec	Twp	Rng	Surface Hole Lease	Lateral Hole Lease	Bottom Hole Lease
16	DRY FORK FED	2-24TH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee

SHL – Surface Hole Lease; LHL – Lateral Hole Lease; BHL – Bottom Hole Lease

Approved Right-of-Way.

ROW Grant	ROW Action	Sec	Twp	Rng	Length	NTE Width
WYW-168470	Existing Improved Road	24	43N	77W	1,739'	70'
	Proposed Improved Road	23	43N	77W	1,097'	70'
					Acres of Disturbance	
					4.56 acres	

Lease Stipulations.

Federal Leases WYW130622 and WYW144541

Controlled Surface Use (CSU): (1) Surface occupancy or use within ¼ mile of the Bozeman Trail will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts; (2) as mapped on the Buffalo Resource Area RMP oil and gas stip overlay; (3) protection the Bozeman Trail if the Affected trail segment is determined to contribute to the eligibility for the national Register of Historic Places.

Limitations. See conditions of approval (COAs) and, above, lease stipulations and Right-of-Way.

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 are 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 this project is because:

1. BLM and Peak 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 Proposed RMP and Final Environmental Impact Statement were released in May 2015. The proposed action was screened against the Final EIS 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 Proposed Alternative.

3. To reduce the likelihood of a “take” under the Migratory Bird Treaty Act, BLM sensitive species nesting habitat removal will occur outside of the breeding season or be cleared by survey on the federal lease (WYW130622, 2-19 location; WYW135921, 1-23 location; WYW 144541, 2-24 location) and recommended for the pad over non-federal minerals (2-23 location).
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 will help meet the nation’s energy need, revenues, and stimulate local economies by maintaining workforces.
6. 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 APD (PRB FEIS ROD, p. 7).
7. The project is clearly lacking in wilderness characteristics as it is on non-federal surface amidst existing developments.
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. Peak certified it has an 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 and drilling plan 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: August 7, 2015

Categorical Exclusion 3 (CX3), WY-070-390CX3-15-125 to 140
Section 390, Energy Policy Act of 2005
Peak Powder River Resources, Dry Fork Federal 1 Plan of Development (POD)
Bureau of Land Management, Buffalo Field Office, Wyoming

Description of the Proposed Action.

Peak Powder River Resources, LLC (Peak) proposes to drill 16 wells and construct associated infrastructure as follows:

Table 1.1. Proposed Wells

#	Well Name	Well No.	Qtr	Sec	Twp	Rng	Surface Hole Lease	Lateral Hole Lease	Bottom Hole Lease
1	DRY FORK FED	2-19H	NENW	19	43N	76W	Federal	Federal/Fee	Fee
2	DRY FORK FED	2-19MH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
3	DRY FORK FED	2-19NH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
4	DRY FORK FED	2-19TH	NENW	19	43N	76W	Federal	Federal/Fee	Fee
5	DRY FORK FED	1-23H	NENW	23	43N	77W	Federal	Federal	Federal
6	DRY FORK FED	1-23MH	NENW	23	43N	77W	Federal	Federal	Federal
7	DRY FORK FED	1-23NH	NENW	23	43N	77W	Federal	Federal	Federal
8	DRY FORK FED	1-23TH	NENW	23	43N	77W	Federal	Federal	Federal
9	DRY FORK FED	2-23H	NENE	23	43N	77W	Fee	Fee/Federal	Federal
10	DRY FORK FED	2-23MH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
11	DRY FORK FED	2-23NH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
12	DRY FORK FED	2-23TH	NENE	23	43N	77W	Fee	Fee/Federal	Federal
13	DRY FORK FED	2-24H	NWNW	24	43N	77W	Federal	Federal/Fee	Fee
14	DRY FORK FED	2-24MH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee
15	DRY FORK FED	2-24NH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee
16	DRY FORK FED	2-24TH	NWNW	24	43N	77W	Federal	Federal/Fee	Fee

Proposed Right-of-Way.

ROW Grant	ROW Action	Sec	Twp	Rng	Length	NTE Width
WYW-168470	Existing Improved Road	24	43N	77W	1,739'	70'
	Proposed Improved Road	23	43N	77W	1,097'	70'
					Acres of Disturbance	
					4.56 acres	

The proposed horizontal oil and gas wells are in the Dry Fork Federal 1 (DFF1) Plan of Development (POD), which includes an area of 3,886 acres. The project area is 28 miles West of Wright, Campbell County, Wyoming. Project elevation ranges from 4,680 to 4,927 feet. The topography has gently sloped draws rising to rolling hills and small buttes with mixed sagebrush and grassland uplands. Ephemeral tributaries of Upper Dry Fork of Powder River, Cottonwood Creek, Seventeen Mile Creek and Little Bullwhacker Creek drain the project area. The climate in the area is semi-arid, averaging 10-14 inches of precipitation annually, about 60% of which occurs between April and September. The jurisdiction for the 4 wells at the 1-23 location is: Privately owned surface (FEE) with federal minerals (FED) at the surface hole location (SHL) and bottom hole location (BHL); the jurisdiction of the 8 wells at the 2-19 and 2-24 locations is: FEE surface with Fed minerals at the SHL and FEE minerals at the BHL, and the jurisdiction

of the 4 wells at the 2-23 location is: Fee surface with Fee minerals at the SHL and Federal mineral at the BHL. Surface owners: Dry Fork Land and Cattle, LLC and BLM; see administrative record (AR). The 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 this CX. Conditional fluid mineral development supports the RMP, the Mineral Leasing Act of 1920, the Federal Land Policy Management Act (FLPMA), and other laws and regulations.

Peak submitted 20 notices of staking (NOS) on May 20, 2014, to the BFO. Peak and BFO completed onsite inspections on August 20, 2014, November 14, 2014, and April 19, 2015. Peak filed 16 applications for permit to drill (APDs) which BLM received on February 11, 2015 included in the DFF1 POD, incorporated here by reference. The onsites evaluated the proposal and modified it to mitigate environmental impacts. The BLM sent a post-onsite deficiency letter to Peak on February 25, 2015. The APDs were considered complete when Peak responded to the Onshore Oil and Gas Order No.1 deficiencies for the project with final revisions on April 15, 2015.

Full effects of the proposal and recommended mitigation measures (RMMs) are in the project surface use plan, Samson Resources Company, North Tree Phase 1 POD Environmental Assessment (EA), WY-070-EA13-77, and BLM Conditions of Approval (COAs) for Conventional Application for Permit to Drill, Appendix A.

Drilling, Construction & Production design features include:

- Peak 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. For each well, the operator anticipates that estimated drilling duration will be 2-4 weeks. Approximately 15,000 barrels (bbls) of water will be needed to drill each well.
- A road network that will consist of upgrading (widening) 1,821 feet of existing unimproved road, 10,336 feet of improved road and 5,195 feet of newly proposed improved well access road. Roads will be constructed with a 24 foot running surface with surface disturbance not to exceed a width of 70 feet. The operator will use Wyoming State Highway 387 and the IDT Road, a privately owned road, to enter the project area. A road maintenance agreement will be ratified on shared roads to maintain existing roads in a condition the same as or better than before operations began. Average daily traffic (ADT) will be greatest during the well pad construction and moving the drill rig on to location (ADT=45) decreasing when the wells are in production (ADT=3); see page 4 of the MSUP.
- A semi-closed loop mud system will be utilized for the well drilling and cuttings will be stored on location in bermed containment areas to dry.
- 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 pad during the drilling and completion of the well.
- If a well becomes a producer, production facilities will be located at the well site and will include a pumping unit, 7 oil storage tanks, 2 water storage tanks, metering building, oil-water separator (heater-treater) for each well on location in addition to a single power drop, flare stack and combustor. There will be no pits at producing oil well locations.
- An existing and proposed above ground powerline will be used if a well becomes a producer. Power will be provided by a 3rd party contactor. It is anticipated that new construction of power will begin at the existing 3-phase overhead lines adjacent to the well pads and continue to a power drop on the well pad.

- Hydraulic fracturing (HF) operations are planned as a ‘plug and perf’ operation done in stages. The process is anticipated to require 1-3 week per well to complete. Approximately 60,000 bbls of water will be needed to frac each well. All water used for HF will come from 1of 3 sources listed in the MSUP. All fresh water will be contained on location in single 40,000 bbl rental Poseidon tanks and no surface pits will be used to hold this water. No additional well pad disturbance is anticipated for HF operations. Completion flowback water will be held in tanks on location and trucked offsite to a disposal facility permitted by Wyoming Department of Environmental Quality (WDEQ); see page 12 of the MSUP.
 - Typically, once the Poseidon tank is set up, it takes 2 weeks to fill, 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).
 - Sand is continuously brought on site in semi-truck loads during pumping. It is necessary to have a safe turning radius available for these trucks. Pumping water may require heating in the winter months.

Figure 1. Typical Equipment Onsite for a Multi-Horizontal Oil Well Drilling Operation.



The Dry Fork Fed 1 POD uses existing roads and infrastructure associated with Samson Resources Company’s North Tree 1 (18 APDs approved 3/26/2013), North Tree 2A (9 APDs approved 1/29/2014), North Tree 2 (10 APDs approved 2/14/2014) PODs. For a detailed description of design features and construction practices associated with the proposed project, refer to the MSUP and drilling plan included with the APDs. Figure 1 above shows a typical horizontal well drilling operation. Also see the Exhibit 1 for the Dry Fork Fed 1 POD project map showing the proposed well locations and associated facilities described above. For a detailed description of design features and construction practices associated with the proposed project, refer to the surface use plan (SUP) and drilling plan included with the APD.

Total surface disturbance for the proposal is 74.5 acres. Peak’s practice is to drill multiple wells from 1 pad and this drives down the surface disturbance numbers per well. Well pad disturbance during construction and drilling will average 10.4 acres per well pad (2.6 acres/well). Once the wells are complete, Peak will reclaim any area of the well pad not needed for production as interim reclamation reducing the footprint by 70%. This project’s interim reclamation reduces overall the long-term surface disturbance by nearly 60% to 31.1 acres.

Table 1.2. Disturbance Summary Peak’s Dry Fork Fed 1 POD:

Facility	Number or Feet	Factor	Disturbance
Engineered Well Pads	4 pads		
Dry Fork Fed 2-19		4 wells	10.0acres
Dry Fork Fed 1-23		4 wells	12.0acres
Dry Fork Fed 2-23		4 wells	10.3 acres
Dry Fork Fed2-24		4 wells	8.2 acres
			Total - 41.5 acres
Existing Roads to be Upgraded			
24 foot Improved Template Road	12,357 feet	70 feet	19.5 acres
Proposed Roads			
24 foot Improved Template Roads	5,195 feet	70feet	8.4acres
Proposed Overhead Power-3rd Party	7,401 feet	30 feet	5.1 acres
			Total Surface Disturbance
			74.5 acres

See the administrative record (AR) for project maps showing the proximity of Dry Fork Fed 1 POD to previous Horizontal Oil well projects and existing oil and gas wells, access roads and infrastructure.

Off Well Pad

Produced water from the four locations will be trucked to reinjection and disposal facilities. See p. 11-12 of the MSUP for the Operator’s plans for produced water.

There are existing gas gathering facilities in the vicinity of the project area. Peak did not include plans for gas pipelines with the APDs and it is anticipated that those will be submitted under sundry notice at a later date. Peak plans to move water needed for drilling and completion operations to the well locations via tanker trucks. Water will be trucked from 1 of 3 private water wells or an existing stock water reservoir; See page 9 of the MSUP. Filling the water storage tanks on location will be done prior to drilling and/or completion operations and may take up to 2 weeks.

Peak requires approximately 7,401 feet of 3rd party electrical power installation from existing utility lines to the proposed wells. The electric runs to the wells will be overhead powerlines to the edge of the pad and buried power to the pumping unit electric motor and other electrically powered devices on site to power the wells. Where BLM authority applies, Peak will propose any alternation to the power route via sundry application or right-of-way application and BLM will analyze such proposal in a separate NEPA analysis. Peak does not anticipate requiring the use of generators for this project. See the project maps included in the SUPO for the layout of the wells road and overhead power lines proposed.

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 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 Resource Management Amendments 2001, 2003, 2011 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 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 APDs are in a developed oil or gas field (any field with a completed confirmation well).

Table 1.3 is a list of NEPA analysis that are within or adjacent to the Dry Fork Fed 1 project area. This information shows that BLM conducted analysis and BLM incorporates these here by reference.

Table 1.3. Overlapping NEPA Analyses by Decision Date

#	Operator	POD / Well Name	NEPA Analysis #	Type Wells / Drilled	Mo/Yr
1	Samson Resources	North Pine Tree 1	WY-070-EA13-077	18/Oil/13	3/26/2013
2	Samson Resources	North Pine Tree 2A	WY-070-390CX3-14-34 to 42	9/Oil/2	1/29/2014
3	Samson Resources	North Pine Tree 2	WY-070-390CX3-14-147 to-156	10/Oil/0	2/14/2014
4	Yates Petroleum	Blade Federal Com #21H and #22H	WY-070-390CX3-14-17 to18	2/Oil/0	11/26/2013
5 ^a	Anadarko Petroleum	Crazy Cat East	WY-070-EA13-028	36/ Oil/ 0	3/5/2013
6 ^b	Lance	Mufasa Fed 11-31H	WY-070-EA12-062	1/ Oil/ 1	3/2012
7 ^b	Lance	Sahara POD	WY-070-EA13-72	21/Oil/ 4	3/2013

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

- a. While not overlapping, incorporate those sections describing and analyzing hydraulic fracturing, its supporting analysis, and the Greater Sage-grouse Section 3.7.12 and 4.8.2.
- b. While not overlapping, incorporate those sections describing and analyzing hydraulic fracturing and its supporting analysis to include but not limited to traffic, water, and air quality.

Approved within 5 years and in the 4 miles analysis area of the Dry Fork Fed 1 POD (as of 6/1/2015).

BLM only included the wells in the Dry Fork Fed 1 POD 4-mile analysis area.

*Well Status within these PODs: 18 Producing Oil (as of 6/1/2015).

- 2) Reasonably foreseeable activity (RFA) is found in the Crazy Cat East (EA), WY-070-EA13-028. This locality includes but is not limited to the approved projects listed in Table 1.3 and will fill-in to 640 acre spacing. BLM also notes from Table 1.3, above, that of the 97 analyzed APDs, only 18 are drilled; thus 79 undrilled, analyzed APDs contribute to the available RFA for this CX3 analysis. The RFA for this analysis area includes 73 sections, oil/gas exploration on 640 acre spacing and possible 320 acre spacing for horizontal wells and 40 acre spacing for vertical, conventional oil wells. (This does not preclude the spacing analysis in the PRB FEIS further reducing the surface disturbance per well.) The project analysis area is the area within 4 miles of the proposed wells and includes only those federal projects approved within 5 years, as of December 2014.
- 3) The tiered NEPA document was finalized or supplemented within 5 years of spudding (drilling) the proposed wells. This Dry Fork Fed 1 POD CX3s tiers to the NEPA analyses in the North Tree 1 POD, WY-070-EA13-077 and the Crazy Cat East, WY-070-EA13-028.

In summary, the analyses 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 in the Dry Fork Fed 1 POD which is similar to both the qualitative and quantitative analyses in the Table 1.3 tiered-to and incorporated NEPA analyses. The BLM reviewed the analyses and found that the analyses considered potential environmental effects associated with the proposal at a site specific level. The Dry

Fork Fed 1 POD 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 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 SUPO, drilling plan, in addition to the Standard COAs found in the PRB FEIS ROD, Appendix A.

Soils/ Vegetation.

The soil and ecological site descriptions prepared by the Natural Resources Conservation Service (NRCS) for the project area fall across the South Johnson County soil survey area. The descriptions show the project area is dominated by Loamy and Shallow Loamy ecological sites in the 10-14 inch Northern Precipitation Zone. The entire Dry Fork Fed 1 2-23 well pad and access road fall across loamy soil types. The Dry Fork Fed 1, 1-23, 1-24 and 2-19 well pads fall across shallow loamy soil types with the access roads being split across both soil types. Other less prevalent soils in the project area are sandy. The interpretive vegetative plant community is a rhizomatous wheatgrass/needleandthread/blue gramma plant community throughout the project area. Peak and Grouse Mountain Environmental Consultants (2015) prepared a reclamation plan that includes detailed soil, ecological site, and vegetative community descriptions of the project area, incorporated here by reference; see the administrative record (AR).

Cushman-Briggsdale association and Stoneham-Zigweid association (loamy soils) are rated as fair reclamation source material and dominate the Dry Fork Fed 1, 2-23 well pad and access road. Shingle-Worf association and Shingle-Cushman association (shallow loamy soils), rated as poor reclamation source material, dominates the Dry Fork Fed 1, 1-23, 1-24 and 2-19 locations. Peak's reclamation plan specifies salvageable topsoil depth for the Dry Fork Fed 1, 1-23, 1-24 and 2-19 well sites at 6 inches and 8 inches for the Dry Fork Fed 1, 2-23 location. They have not performed the needed shovel tests to determine topsoil depth for the well sites but BLM estimates salvageable soil depth across the disturbance area at 8-12 inches maintaining an organic component (plant roots) with the soil. This was confirmed by onsite field evaluation. The NRCS' SSURGO data shows the soil components of greatest concern being droughtiness, lack of organic matter (1 to 2%), too clayey, high water erosion potential and shallow depth to bedrock. Restrictive layers of the soils if any are 20-40 inches in depth. The soil is non-saline. The soil is poorly rated as suitable construction material due to low soil strength and high shrink/swell ratio. Additional information on the impacts to soils, and its influence on cumulative effects from energy development are in the affected environment and environmental effects sections of the North Tree 1 POD EA, pages 9-12 and 22-24, incorporated here by reference.

Water Resources.

The historical use for groundwater in this area was for stock water. A search of the WSEO Ground Water Rights Database showed 8 registered stock water wells and 2 ground water monitoring wells within 1 mile of the 16 proposed wells in the project area with depths ranging from 9.5 to 480 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 operations. The depth to the Fox Hills Formation ranges from 7,233 to 7,405 total vertical feet. The Fox Hills, the deepest penetrated fresh water zone in the PRB lies well above the target formation. Table 1.4 shows the depths where casing will be set and cemented in place. The operator will verify that there is

competent cement across the aquifer, from 200 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.

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

#	Well Name/ Well #	Total Depth of Surface Casing (feet)	Total Depth of Intermediate Casing (feet)	Depth to Fox Hills (feet)	Top of Intermediate Casing Cement
1	Dry Fork Fed 2-19MH,NH,PH,TH	2,500	9,987	7,235	~7,035
2	Dry Fork Fed1-23 MH,NH,PH,TH	2,500	10,132	7,405	~7,205
3	Dry Fork Fed2-23 MH,NH,PH,TH	2,500	10,095	7,233	~7,033
4	Dry Fork Fed2-24 MH,NH,PH,TH	2,500	9,999	7,343	~7,143

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 a 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.

Wetlands/ Riparian.

A search of the National Wetland Inventory shows that there are 6 freshwater emergent wetlands and freshwater ponds within 0.5 mile of the 16 well locations. None of these 6 known wetlands will be impacted by surface disturbing activities associated with the construction of the well pads and associated access roads. Best management practices will be implemented to divert runoff that could carry sediment from the constructed features to a known wetland.

Other Leasable and Locatable Minerals.

The project area is over and amidst mining claims, most likely for uranium, given the area is known for uranium exploration and production. The Fort Union and the Wasatch Formations are the most important uranium-bearing formations in the PRB, and uranium-bearing strata in these formations tend to be less than 800 feet deep in this area. Uranium recovery in the area tend to be via in-situ recovery (ISR), and involves 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 surrounding these wells. Direct and indirect effects, cumulative effects, mitigation measures, and residual effects are found in the Sahara POD, WY-070-EA13-072, pp. 14 and 26, incorporated here by reference – and BLM anticipates similar effects for this proposal.

There are a total of 34 individual mining claims located in the same area as these proposed oil wells. Possible conflict(s) may occur between any uranium projects planned or in operation and these proposed wells. Peak Powder River Resources should ensure they’ve checked for uranium projects in the area of this well, and contact those companies. Although uranium ISR operations and oil/gas operations can co-exist in the same area, there may be timing and/or location conflicts.

Invasive Species.

Known infestations of state listed noxious weed in the immediate area of the Dry Fork Fed 1 POD include Scotch thistle, Russian thistle, spotted knapweed, salt cedar, buffalo bur. Peak and Grouse Mountain Environmental Consultants contacted the Johnson County Weed and Pest office about what noxious weed might be of concern in the immediate area. Peak has developed an integrated weed management plan to address noxious weed including those listed above as well as cocklebur and Canada thistle.

Impacts anticipated occurring and mitigation considered with the implementation of the proposals will be similar to those analyzed in the EA adjacent to this proposal and has substantially similar characteristics, and are incorporated here by reference: North Pine Tree 1, WY-070-EA13-077, pp.13 and 27, incorporated here by reference and BLM anticipates similar effects for this proposal.

Wildlife.

Grouse Mountain Environmental Consultants (GMEC) completed a habitat assessment and wildlife surveys for Peak including Greater Sage-Grouse (GSG) lek and raptor nest surveys April 18 and 30, 2015. They also completed sharp-tailed grouse, black-tailed prairie dog colony and mountain plover nesting surveys. Wintering bald eagles surveys were conducted January 12, 28 and February 5, 2015. The habitat assessment did not discover suitable habitat for Ute ladies' trusses orchids or blowout penstemon. Surveys completed were conducted per the PRB Interagency Working Group's protocols; see: http://www.blm.gov/wy/st/en/field_offices/Bufalo/wildlife.html.

The affected environment within 4 miles of the proposed wells (70 square miles) has 591 active oil and gas wells (in addition to 36 of plugged and abandoned wells) and associated access roads and infrastructure to support the production. There are also 24 pending APDs associated with the Dry Fork Fed 1 POD for new wells. Habitat quality in the area is highly impacted by oil and gas development with an average of 8.9 wells per square mile currently on the landscape. This area was extensively developed for CBNG; roads, OH power, water pump stations, & compressors.

BLM reviewed the proposed APDs and determined that the proposed APDs, combined with the COAs (and design features), are: (1) consistent with the FEIS, the RMP and the above tiered NEPA analyses; and (2) consistent with the programmatic biological opinion (ES-6-WY-02-F006), Appendix K. The proposed well locations and infrastructure are a result of attempts by Peak and the BLM to reduce impacts to GSG, ferruginous hawks and other migratory birds, and incorporates recommendations provided to the BLM by the U.S. Fish and Wildlife Service (FWS). The affected environment and environmental effects for wildlife are discussed in, and anticipated to be similar to the Mufasa Fed 11-31H Well EA, WY-070-EA12-062 (pp. 7-11 and 16-21), the Sahara POD EA, WY-070-EA13-72, (pp. 16-17 and 31-33), and the Crazy Cat East EA, WY-070-EA13-028, (pp. 29-34 and 49-56), incorporated here by reference.

Raptors

There are 22 known raptor nests within 0.5 mile of the 16 proposed well locations, along with overhead power lines, local access roads, and production facilities. Twelve of the known nests were inactive, 9 others were gone and 1 was occupied by black-billed magpie. GMEC located 1 new nest occupied by nesting red-tailed hawks. All of the nests have sufficient buffers based on line of sight and topographic relief. from the well locations. One nest is a ferruginous hawk nest. Suitable nesting habitat and prey species are present throughout the area. The PRB FEIS analyzed direct and indirect effects to raptors, pp. 4-216 to 4-221. This project will result in a direct loss of foraging habitats (approximately 74.5 acres). The cumulative effects associated with the project are within the analysis parameters and impacts described in the PRB FEIS. Refer to the PRB FEIS for details on expected cumulative impacts, p. 4-221.

Effects to raptors were analyzed in the North Pine Tree 1, WY-070-EA13-077, pp.13, 18-20 and 28-30. Timing limitations were added to the POD as conditions of approval for both general raptors, and

specifically for ferruginous hawks. A condition of approval consistent with Peak's commitment for migratory birds will be applied to the permit for the Dry Fork Fed 1 wells.

Greater Sage-Grouse (GSG)

General effects from oil and gas development to GSG in the vicinity of the project area were analyzed in the Crazy Cat East Oil and Gas Proposal EA, pp. 54-56 and the Sahara POD EA, WY-070-EA13-72, 2013, Section 4.6.4.1, pp. 34-37., both incorporated here by reference. Local effects to GSG were analyzed in the North Pine Tree 1, WY-070-EA13-077, pp 15-16 and 30-32. The BLM typically applies a controlled surface use buffer of 0.25 miles for GSG leks. There are currently 2 producing federal wells operated by WPX within 0.25 mile of the lek and a crowned and ditched access road that runs directly through the lek. Secondary roads lead to the existing CBNG wells. One of these roads currently used to access a third CBNG well operated by WPX Energy Rocky Mountain LLC provides access to the Dry Fork Fed 1-23 location. Peak planned to utilize this existing access road which is 0.24 miles northeast of the lek, entering and exiting to the northeast. The Dry Fork Fed 1-23 wells are located approximately 0.31 miles from the Bushwhacker Creek 1 lek in sagebrush grassland habitat. BLM confirmed GSG use at the well location during the onsite field visit. In order to comply with the Executive Order 2011-5, BLM and Peak agreed that a new road would be constructed just beyond 0.25 mile of the lek to access the Dry Fork Fed 1-23 location. Other alternatives to the road were explored but were not acceptable to the surface owner. Traffic, light and heavy duty trucks, will increase with approval of the well. Heavy trucks are expected to visit the well every 1 to 2 days to haul oil or water from the location, in addition to pumper traffic from equipment inspections.

The next nearest lek is the Bushwhacker Creek IV lek 1.8 miles southwest of the Dry Fork Fed 2-23 well location. Suitable nesting and brood rearing habitat is present at each of the 4 well locations however each location is within the vicinity of extensive oil and gas development. To mitigate impacts to GSG at the leks during the breeding season; the BLM will apply a timing limitation on construction of the road from March 15 – May 15, for the life of the project. It should be noted however that Sampson Energy received an exemption to this timing limitation stipulation for this same area to allow for year round drilling.

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 information in 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) of the Mufasa Fed 11-31H Well EA, WY-070-EA12-062, incorporated here by reference).

Migratory Birds

All of the proposed well pads in Table 1.1 are in sagebrush obligate migratory bird habitat. To reduce the likelihood of a "take" under the MBTA, the BLM biologist requires that pad construction (vegetation removal), for the 1-23, 2-19, and 2-24 pads, occur outside of the breeding season for the greatest quantity of BLM sensitive passerines (May 1- July 31) where suitable nesting habitat for sagebrush obligates is present. 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 coordinate with BLM biologists to determine protocol. The nest search will consist of in areas where vegetation will be removed or destroyed. The BLM recommends that the proposed 2-23 well pad and associated infrastructure have timing limitations applied for well pad construction during the nesting season for sagebrush obligate passerines (May 1 to July 31).

Effects to migratory birds from surface disturbing and disruptive activities associated with development of the proposed wells are similar to the wells previously analyzed in the North Pine Tree 1, WY-070-EA13-077, pp 14, 29-30. The BLM determined that the proposal is in compliance with the MBTA as clarified in Instruction Memorandum No. WY-2013-005 Interim Management Guidance for Migratory Bird Conservation Policy on Wyoming Bureau of Land Management (BLM) Administered Public Lands Including the Federal Mineral Estate.

Ferruginous Hawk

One ferruginous hawk nests is included in the BLM raptor nesting database as occurring within the project area. This nest has not been occupied since discovered in 2007. Proposal activities may have direct and indirect impacts to birds or habitat, but will not likely contribute to a trend towards federal listing or a loss of population viability. The proposal's cumulative effects are within the analysis parameters and impacts described in the PRB FEIS. Mitigation measures in place to protect raptors will provide protection for ferruginous hawks. Effects to migratory birds from surface disturbing and disruptive activities associated with development of the proposed wells are similar to the wells previously analyzed in the North Pine Tree 1, WY-070-EA13-077, pp. 13, 18-20 and 28-30.

Western Burrowing Owl

The PRB FEIS discusses impacts to sensitive species on pp. 4-257 to 4-273. Approximately 644 acres of active black-tailed prairie dog towns were mapped within the project area, which could provide nesting habitat for burrowing owls. There are no known burrowing owl nests in the BLM raptor nesting database - occurring in the project area. The area was surveyed in 2014 and no owls were observed. Three of the well locations, Dry Fork Fed 2-23, 2-24 and 2-19 and 1 mile of access road are proposed within active black-tailed prairie dog colonies. Proposal activities may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or a loss of viability to the population or species. Effects to migratory birds from surface disturbing and disruptive activities associated with development of the proposed wells are similar to the wells previously analyzed in the North Pine Tree 1, WY-070-EA13-077, pp. 33.

Mountain Plover

The PRB FEIS analyzed the direct and indirect impacts to mountain plover, pp. 4-254 to 4-255. Suitable mountain plover habitat is present in the proposed development. Prairie dog colonies and flat ridgelines with short vegetation were the main suitable areas observed, and the focus of survey efforts. No mountain plover observations were made in the area during spring 2014. Proposal activities may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or a loss of viability to the population or species. The PRB FEIS analyzed the cumulative effects to mountain plovers, pp. 4-245 to -255. BFO will require a 0.25 mile timing limitation on surface-disturbing activities for potential nesting habitat during the nesting season to reduce impacts to nesting mountain plovers. Surface-disturbing activities may displace mountain plovers, even with the collateral mitigating effect of timing limitations of other activities associated with development. Effects to migratory birds from surface disturbing and disruptive activities associated with development of the proposed wells are similar to the wells previously analyzed in the North Pine Tree 1, WY-070-EA13-077, pp. 33-34.

Black-tailed Prairie Dog

The PRB FEIS discusses direct and indirect impacts to black-tailed prairie dog on pp. 4-255 and pp. 4-256. Proposed activities may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or a loss of viability to the population or species. An increase in roads and traffic may cumulatively contribute to increased mortality from collisions or even poisoning. BLM proposed no mitigation and finds the residual effects within the parameters found in the PRB FEIS, pp. 4-257 to 4-273. Effects to black-tailed prairie dogs from surface disturbing and disruptive activities associated with

development of the proposed wells are similar to the wells previously analyzed in the North Pine Tree 1, WY-070-EA13-077, pp. 34.

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. 70150049) 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
48JO134	Bozeman Trail	Eligible
48JO3059	Ft. Fetterman/Ft. McKinney Telegraph Line	Eligible

Some of the project area analyzed in this EA 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.

Sites 48JO134 (Bozeman Trail) and 48CJO3059 (Ft. Fetterman to Ft. McKinney Telegraph Line) are eligible for the NRHP. Contributing portions (typically expressed as wagon ruts) of each site are present in the project area. Previously recorded segment 64 of the Bozeman Trail has been determined eligible, non-contributing with SHPO concurrence (R&C# 0315ECK009); therefore lease stipulations associated with the Bozeman Trail in lease WYW130622 and WYW144541 are no longer applicable. None of the contributing portions of the sites retain their integrity of setting due to modern additions to the landscape including CBM wells, upgraded roads, pipelines, reservoirs, POD buildings, compressor stations, etc.

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(E)(iv), the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on March 18, 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) 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 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	Jim Verplancke	Archaeologist	Ardeth Hahn
Supr NRS	Casey Freise	Wildlife Biologist	Jim Verplancke
Petroleum Engineer	Jonathan Shepard	Geologist	Kerry Aggen
LIE	Christine Tellock	Supr NRS	Bill Ostheimer
Soils	Arnie Irwin	Assistant Field Manager	Chris Durham
Assistant Field Manager	Clark Bennett	NEPA Coordinator	Tom Bills
Wyoming State Historic Preservation Officer	Mary Hopkins	Realty Specialist	Denise Oliverius

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 Dry Fork Federal 1 POD CX3 (16) 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.

_____/s/ Duane W. Spencer
Field Manager

August 7, 2015
Signature Date

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