

**DECISION RECORD**

**Applicant:** Jonah Energy LLC

Leases: WYW-118154, WYW-107040, WYW-144998, WYW 126677, WYW 128703, WYW-160395

Natural Gas Wells: Stud Horse Butte (SHB) 18-14 well pad: 84-14, 91-14, 83-14, 18-14

SHB 214-9 well pad: 214-09, 215-09B, 215-09C, 216-09, 213-09A

Cabrigo (Cab) 71-19 well pad: 122-19, 126-19, 125-19X, 71-19

SHB 208-13 well pad: 209-13A, 209-13B, 209-13C

SHB 34-14 well pad: 207-14B, 94-14, 34-14

SHB 77-04 well pad: 61-04, 67-04, 78-04, 202-09

SHB 36-14 well pad: 90X-14, 204-14, 208-14, 207-14A, 36-14

SHB 18-09 well pad: 204-09, 95-09, 90X-09, 19-09, 91-09, 91X-09, 92-09, 18-09

SHB 218-11 well pad: 219-11C, 218-11, 223-11

SHB 14-04 well pad: 114-04, 60-04, 69-04

SHB 73-04 well pad: 74-04, 125-04, 203-09B, 122-04

SHB 17-08 well pad: 206-08, 205-08, 17-08, 81-08

SHB 20-10 well pad: 20-10, 201-10B

SHB 203-15B well pad: 203-15B, 203-15C, 222-10, 220-10, 216-10

SHB 33-10 well pad: 206-10

SHB 17-10 well pad: 83-10, 18-10, 201-10C, 91-10, 91X-10, 30-10, 31-10

SHB 57-11 well pad: 57-11, 218-10, 71-11, 72-11, 221-11A

**Applicant:** LINN Operating, Inc.

Leases: WYW 12677, WYW 128703, WYW 118154, WYW 130317

Natural Gas Wells: Cabrigo 15-13 well pad: Cab 13n1, Cab 13o2, Cab13o3, Cab 13p2

Cabrigo 13-13 well pad: SHB13k4, SHB13k6, Cab13L1, Cab13L2, Cab13L3, Cab13L4, Cab13L5, Cab13L6, Cab13m2, Cab13m3, Cab13m4, Cab13m5, Cab13n2, Cab13n3, Cab13n4

SHB10o well pad: SHB10o2, SHB10o3, SHB10o4, SHB10o5, SHB10p1, SHB10p2, SHB10p3, SHB10p4, SHB10p5, SHB10p6

Cabrigo 46-13 well pad: Cabrigo Federal 35-13, Cabrigo Federal 36-13, Cabrigo Federal 45-13, Cabrigo Federal 46-13, SHB 13b1, SHB 13b2, SHB13g5, SHB 13g6, SHB13h1, SHB13h2, SHB13h3, SHB13h4, SHB13h5, SHB13h6.

Cabrigo 23-13 well pad: Cabrigo Federal 23-13, Cabrigo Federal 24-13, Cabrigo Federal 25-13, Cabrigo Federal 26-13, SHB13b3, SHB13c1, SHB13c2, SHB13c3, SHB13c4, SHB13c5, SHB13c6, SHB13d5, SHB13d6.

SHB9c well pad: SHB9c1, SHB 9c2, SHB 9c3, SHB9c5, SHB 9c6, SHB9f1, SHB9f2, SHB 9f4, SHB 9f5, SHB 9f6.

Sand Draw Federal (SDF) 61-11 well pad: SDF52-11, SDF61-11, SDF62-11, SDF11i2, SDF11i3, SFD11i4, SDF11i5, SDF11i6, SDF11j5, SDF11j6.

**Location: Jonah Gas Field, 6th Principal Meridian, Sublette County, Wyoming**

**T. 29 N., R 107 W.    Sec. 17, 18, 19, 20, all**  
**Sec. 29            N<sup>1</sup>/<sub>2</sub>N<sup>1</sup>/<sub>2</sub>, N<sup>1</sup>/<sub>2</sub>S<sup>1</sup>/<sub>2</sub>N<sup>1</sup>/<sub>2</sub>**  
**Sec. 30            N<sup>1</sup>/<sub>2</sub>N<sup>1</sup>/<sub>2</sub>, N<sup>1</sup>/<sub>2</sub>S<sup>1</sup>/<sub>2</sub>N<sup>1</sup>/<sub>2</sub>**

**T. 29 N., R 108 W.    Sec. 2, 4, 9, 10, 11, 12, 13, 15, 16, all**

Sec. 3 S<sup>1/2</sup>, S<sup>1/2</sup>N<sup>1/2</sup>  
Sec. 5 E<sup>1/2</sup>, SE<sup>1/4</sup>NW<sup>1/4</sup>, E<sup>1/2</sup>SW<sup>1/4</sup>  
Sec. 8 NE<sup>1/4</sup>, E<sup>1/2</sup>SE<sup>1/4</sup>  
Sec. 14 N<sup>1/2</sup>, SE<sup>1/4</sup>, N<sup>1/2</sup>SW<sup>1/4</sup>  
Sec. 22 N<sup>1/2</sup>, N<sup>1/2</sup>S<sup>1/2</sup>, N<sup>1/2</sup>S<sup>1/2</sup>SE<sup>1/4</sup>  
Sec. 25 NE<sup>1/4</sup>NE<sup>1/4</sup>

## Sublette County, Wyoming

EA Number: WY-100-EA16-36

Prepared by: BLM PFO, Pinedale, Wyoming

### Background and Summary

In January 2016, Jonah Energy LLC (Jonah Energy) and LINN Operating, Inc. (LINN Operating), collectively referred to as “Operators”, submitted a Plan of Development to the Bureau of Land Management (BLM) Pinedale Field Office (PFO) proposing to conduct year-round development in a portion of the previously approved Jonah Infill Drilling Project Area (JIDPA). This area, referred to as the Year-Round Development (YRD) Project Area, occupies approximately the northern third of the JIDPA. The January 2016 Plan of Development contemplates the development of 245 wells on 24 multi-well pads (YRD Pads) and associated access roads and natural gas gathering lines up to 5-year period. All wells and disturbance for YRD Pads, access roads, and natural gas gathering lines were previously analyzed and authorized as part of the Jonah Infill Drilling Project (JIDP) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD).

As explained in the Environmental Assessment (EA) analyzing the Operator’s Plan of Development, the JIDP ROD, the Pinedale Resource Management Plan (RMP) as amended by the Approved RMP Amendment (ARMPA) for Greater Sage-Grouse, and the oil and gas leases relevant to the YRD Project Area, include timing limitations which seasonally restrict development within 2 miles of an “occupied” greater sage-grouse lek in order to protect nesting and early brood-rearing for any lek located outside of Priority Habitat Management Area (PHMA). The YRD Project Area is not within greater sage-grouse PHMA, connectivity habitats, or Winter Concentration Areas. It is in a General Habitat Management Area (GHMA). There are five occupied leks within 2 miles of the proposed YRD Pads; however, only two of the leks are “active” leks (Sand Draw Reservoir and South Rocks). In addition to the greater sage-grouse timing limitations, the Pinedale RMP also imposes timing limitations on all surface disturbing activity in big game crucial winter ranges between November 15 and April 30. As explained in the EA, a large portion of the YRD Project Area is within Wyoming Game & Fish Department (WGFD) designated pronghorn crucial winter range; however, most of the area of disturbance for the YRD Pads has been block-cleared by the BLM (timing limitations do not apply).

Even though the JIDP ROD contemplated vertical wells on single-well pads, the Operators have recently been conducting directional drilling in the JIDPA from multi-well pads in order to develop wells more quickly and reduce overall surface disturbance, human presence, and vehicle traffic. As development of the JIDP has progressed, the potential well pad locations outside of the area where the greater sage-grouse and/or pronghorn timing limitations apply have largely been developed. In order to be able to utilize directional drilling techniques economically, however, the Operators are requesting to develop their leases year-round within the greater sage-grouse timing limitation period and within the big game crucial winter range

timing limitation for pronghorn because adhering to the greater sage-grouse and pronghorn timing limitations will render directional drilling on multi-well pads economically infeasible because of the expenses associated with the additional rig mobilizations and demobilizations on a seasonal basis.

The Operator's Proposed Action, as presented in their Plan of Development, is to allow year-round development within the YRD Project Area during seasonal timing limitation periods for greater sage-grouse nesting and brood-rearing and for pronghorn crucial winter range. With the exception of the timing limitations, the development will be subject to all of the applicable administrative requirements identified in the EA. The Operators have identified 24 YRD Pads from which year-round development will occur and a total of 245 wells will be developed; under the 2006 JIDP ROD, those same wells would have been developed from 245 well pads. This multi-well pad approach reduces temporary disturbance from approximately 1,314 acres to only 232 acres and also reduces total development time.<sup>1</sup> This reduction in acreage disturbed and development time will reduce associated human presence and traffic compared to what was analyzed under the JIDP ROD.

In addition to the Proposed Action, the BLM developed the BLM Mitigation Alternative in order to potentially reduce the environmental impacts of the YRD Project. In terms of oil and gas development, the BLM Mitigation Alternative is identical to the Proposed Action. It includes year-round development on 24 YRD pads and all administrative requirements, conditions of approval (COAs), and mitigation described under the Proposed Action will also apply. In addition to those measures, under the BLM Mitigation Alternative, the BLM will require the Operators to convert 3 miles of problem fence lines into drop-down fences, and modify 10 gates/crossing locations in known pronghorn crossing areas in order to mitigate potential impacts to wintering pronghorn. To mitigate potential impacts to greater sage-grouse, the BLM Mitigation Alternative requires noise mitigation to reduce noise levels to 40 dBA or below as explained below and in the EA.

## **Decision**

It is my decision to approve the BLM Mitigation Alternative and to allow the Operators to conduct year-round development in the YRD Project Area subject to the conditions set forth in this decision, any applicable mitigation measures identified in the EA, the 2006 JIDP ROD, and the Pinedale RMP.

Approval of the BLM Mitigation Alternative authorizes an exception, through the BLM's wildlife exception process, to the following timing limitations currently applicable to the YRD Project Area:

- Surface disturbing and/or disruptive activities will be prohibited from March 15 to June 30 to protect greater sage-grouse nesting and early brood-rearing habitats within 2 miles of the lek or lek perimeter of any occupied lek located outside of PHMAs (Management Decision SSS 9 in the ARMPA).
- Seasonal Wildlife Stipulation for all surface disturbing activities from November 15 to April 30 in pronghorn crucial winter range (Pinedale RMP, Appendix 12).

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<sup>1</sup> The Operators estimate that 146 wells will be drilled within the greater sage-grouse timing limitation period and 99 wells will be drilled outside of that period. Surface disturbance for YRD Pads, access roads, and natural gas gathering lines and the proposed wells will occur as authorized under the JIDP ROD and will mostly occur outside of the timing limitation period for greater sage-grouse.

Approval of the BLM Mitigation Alternative is subject to the mitigation requirements identified above and described in Exhibit I.

1. Noise will be limited to 40 dBA as described in Exhibit I. This will be demonstrated through modeling.
2. The exception to the seasonal wildlife timing limitation for pronghorn will apply to four YRD Pads in which the location is within pronghorn crucial winter range but has not been block-cleared (timing limitation already excepted). Mitigation including fence modifications of approximately 3 miles and installation of approximately 10 gates and/or crossing locations will reduce effects to wintering pronghorn in the YRD Project Area (see Exhibit I).
3. Finally, the Operators will work with the Pinedale Anticline Project operators to develop a conservation strategy acceptable to the BLM for the Yellow Point Lek Complex within 1 year of this decision. As part of the development of the conservation strategy the Operators shall consider, at a minimum, the following measures: (a) minimizing drilling-associated disturbance that occurs during the greater sage-grouse timing limitation period; (b) using sound blankets or other strategies to minimize disturbance associated with noise related to drilling activities; (c) minimizing the number of personnel at sites while maintaining human safety; (d) minimizing the number of vehicles and vehicle trips to each site; (e) minimizing vehicle trips and human activity at the wells after drilling; and, (f) creating or improving nesting and foraging habitat during reclamation actions.

As explained in the EA, this decision does not constitute final approval for all actions, such as approval for individual applications for permit to drill (APDs), rights-of-way, and sundry notices associated with the BLM Mitigation Alternative or development in the YRD Project Area. The analysis in the EA and this decision provide the BLM's Authorized Officer with information that could be used to inform final approval of such project components, approval of which will still be subject to applicable COAs, other restrictions, and RMPs. Failure to comply with the requirements of this decision could impact such approvals in the future.

The U.S. Fish and Wildlife Service (FWS) Final Biological Opinion (Appendix D to the JIDP ROD) included an average annual depletion of 1,006.7 acre-feet per year with a total depletion of 12,483 acre-feet over the 12.4-year life of the project. To date (through 2015), total depletion is about 6,000 acre-feet. Estimated average annual depletion for the YRD Project is 734 acre-feet per year. The estimated average annual depletion of 734 acre-feet per year (3,670 acre-feet for 5 years) added to the total depletion through 2015 (6,000 acre-feet) will not exceed the 12,483 acre-feet total included in the FWS Final Biological Opinion.

The BLM Mitigation Alternative conforms to nonattainment requirements and is not subject to a conformity determination (with 84 wells in YRD Project Year 3 rather than 91 wells) because nitrogen oxide (NO<sub>x</sub>) and volatile organic carbon (VOC) emissions will be below the de minimis thresholds of 100 tons per year. Prior to Year 3, the Operators may submit a revised emissions inventory to the BLM for evaluation and approval if they can demonstrate that the YRD Project (with 91 wells) conform to nonattainment requirements. This decision has also been screened and is in compliance with the Pinedale RMP and the ARMPA for the Rocky Mountain Region.

The BLM Mitigation Alternative will not have new significant impacts and therefore, preparation of an environmental impact statement is not required.

**1. Compliance with applicable laws:** The BLM is authorized to approve mineral development on BLM-administered public lands pursuant to the National Environmental Policy Act (NEPA), Energy Policy Act of 2005, Mineral Leasing Act (MLA) of 1920, as amended; Federal Land Policy Management Act (FLPMA) of 1976, the Land Use Plan terms and conditions as required by 43 Code of Federal Regulations (CFR) § 1610.5-3, Pinedale RMP, ARMPA, Endangered Species Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, Wyoming Oil and Gas Commissions Regulations, Wyoming Department of Environmental Quality regulations, Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Resource Conservation and Recovery Act of 1976 (RCRA). The BLM Mitigation Alternative will allow the leaseholders to explore for oil and gas resources on their federal oil and gas leases WYW-118154, WYW-107040, WYW-144998, WYW 126677, WYW 128703, WYW-160395, and WYW 130317.

**2. Selected Alternative:** The BLM Mitigation Alternative has been designed to avoid or minimize environmental impacts to the extent feasible. Operator-committed practices, development procedures, administrative requirements, COAs, and mitigation are found in the JIDP FEIS and ROD and the Pinedale RMP and ARMPA (see Section 2.3 in the EA - WY-100-EA16-36). *Adaptive management strategies (see Attachment C to the EA) will be considered if success is not achieved through these design features.*

The BLM Mitigation Alternative will impact resources as described in the EA and the JIDP FEIS. Those analyzed resources were: air quality and climate (including greenhouse gases), soils, paleontological resources, water, noise and odor, invasive non-native species and noxious weeds, vegetation, special status plant species, special status animal species, migratory birds, wildlife and fisheries, Native American religious concerns, cultural and historical resources, visual, socioeconomics, transportation and access, hazardous materials, recreation, and livestock grazing. These resources and other resources not mentioned were analyzed in detail through the Pinedale RMP, the ARMPA, JIDP FEIS, Continental Divide-Creston DEIS, Modified Jonah II EA, and Jonah II EIS.

**3. FONSI:** I have determined that the BLM Mitigation Alternative conforms to the documents this EA is tiered to, the Pinedale RMP ROD, the ARMPA, the CD-C Draft EIS, and previous NEPA documents in the Jonah Field. I have reviewed this EA including the analysis of potentially new significant environmental impacts. I have determined that the BLM Mitigation Alternative with the operator-committed measures, development procedures, administrative procedures, COAs, and additional mitigation as described in the EA (**WY-100-EA16-36**) will not have any new significant impacts (see Finding of No Significant Impact for the EA) on the human environment, thus an EIS is not required (see also JIDP FEIS and ROD, Pinedale Field Office RMP, and ARMPA). It is my decision to implement the BLM Mitigation Alternative. There are no limitations when the decision may be implemented.

**4. Public Involvement.** The EA was made available for public comment for 15 days from February 15 to February 22, 2016. A total of 25 comments were received including four from State of Wyoming agencies, three from local governments, nine from business and industry, four from environmental groups and five from individuals. The comments were reviewed against the Proposed Action and alternatives and incorporated into the EA. Seventeen comments (all of the state agencies and local governments) showed general support to approve the YRD Project. The WGFD indicated in their letter that they support the reduction of acres outlined in the proposal along with the actions outlined in the BLM Mitigation Alternative. Six comments were opposed to approval of the YRD Project due to wildlife concerns. Two comments were neutral

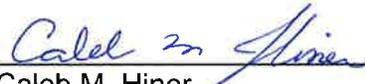
with concerns specific to protection for greater sage-grouse. Response to public comment including discussion on the revisions to the EA based on public comment is noted in Attachment A to the EA. Revisions to the EA include removal of the requirement to update the Transportation Plan, clarification of the requirements for fence modifications, and the addition of the requirement for the Operators to work with the Pinedale Anticline Project operators on a conservation strategy for the Yellow Point Lek Complex.

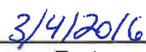
**5. Rationale for Alternative Selected.** The chosen alternative, the BLM Mitigation Alternative, was selected by evaluation against the national environmental policy, in Section 101 of NEPA and implemented through regulations, policies and guidelines issued by the Council on Environmental Quality at 40 CFR § 1500. The BLM Mitigation Alternative was selected over the Proposed Action and the No Action Alternative because there were no new significant impacts to overrule the decision and because the impacts of the BLM Mitigation Alternative relative to the impacts authorized under the 2006 ROD for the Operators to develop their existing oil and gas leases as outlined in the 2006 ROD. The BLM Mitigation Alternative was selected over the Proposed Action because additional mitigation is included in the BLM Mitigation Alternative, to reduce potential effects to greater sage-grouse nesting and brood-rearing and wintering pronghorn.

**6. Appeal Procedures.** This decision is subject to administrative review under BLM regulation in accordance with 43 CFR Part 4 (and subsections that apply). Any request for administrative review of this decision must include the information required within the 43 CFR Part 4, including all supporting documentation. Such a request must be filed in writing with the State Director (920), Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, within 20 business days of the date such notice of decision was received or considered to have been received. This decision will be considered to have been received seven (7) business days from the date it is mailed. This decision shall take effect immediately upon the date it is signed and shall remain in effect while any appeal is pending unless the State Director or the Interior Board of Land Appeals issues a stay.

A petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- The relative harm to the parties if the stay is granted or denied,
- The likelihood of the appellant's success on the merits,
- The likelihood of immediate and irreparable harm if the stay is not granted, and
- Whether the public interest favors granting a stay.

  
Caleb M. Hiner  
Field Manager  
Pinedale Field Office

  
Date