United States Department of the Interior
Bureau of Land Management
Bakersfield Field Office

Environmental Assessment
Finding of No Significant Impact (FONSI)

Berry Petroleum Company
Midway Sunset; 38 Applications for Permit to Drill
DOI-BLM-CA-C060-2019-0093-EA

BACKGROUND

Bureau of Land Management (BLM) proposes to approve thirty-eight (38) Applications for Permit to Drill (APD's) submitted by Berry Petroleum Company to drill Wells: Southwestern HP-21, HP-22, HP23, HP24, HP-25, HP-26, HP-27, HP-28, HP-29, HP30, HP31, HP-32, 56-61, 56-63, 57-60, 57-62, 58-59, 58-61, 58-63, 59-58, 59-60, 59-62, 60-59, 60-61, 60-63, 61-58, 61-60, 61-62, 61-64, 62-59, 62-61, 62-63, 63-60, 63-62, 63-64, 64-61, 64-63, & 64-65 on federal Mineral lease (CAS0019636) in Section 2, T31S, R22E, MDBM. The proposed project would occur on public lands containing BLM administered subsurface minerals within the Midway Sunset Oilfield.

The purpose of the proposed action is to provide Berry Petroleum Company with the authority to drill thirty-eight (38) new oil and monitoring wells and stage associated facilities required to increase production from their federal mineral lease (CAS0019636) and to supply energy resources to the American public. The need for the proposed action is to respond to the APD's submitted by the applicant to conduct operations on lands containing BLM administered subsurface minerals.

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. The purpose of this document is to disclose and analyze the environmental consequences that are anticipated from the drilling of thirty-eight (38) new wells on an existing federal Mineral lease (CAS0019636) and the construction of a temporary drilling sump, and a temporary staging area, in the Midway Sunset Oilfield.

Finding of No Significant Impact

On the basis of the information and analysis contained in the EA, and all information found in the record of this action, it is my determination that: (1) approval of the Proposed Action will not have significant environmental impacts beyond those already addressed in the Bakersfield Resource Management Plan, approved in December 2014; (2) the Proposed Action is in conformance with the Resource Management Plan; and (3) the Proposed Action does not have a significant effect on the human environment. Therefore, an environmental impact statement for the proposed action is not necessary and will not be prepared. This finding is based on the following discussion:

Context: The proposed project is located on BLM land and administered subsurface minerals in Section 2, T31S, R22E, MDBM on Berry's federal Mineral lease (CAS0019636). The

discretionary action is to approve the thirty-eight (38) APD's submitted by Berry for the drilling of thirty-eight (38) new oil and monitoring wells, which would also include the use of existing of roads, and well pads, and the construction of temporary drilling sumps, and a temporary staging area for equipment and testing of produced fluids in the Midway Sunset Oilfield.
The proposed activity is a site-specific action with minor localized effects on air quality, cultural resources, paleontological resources, soils, and special status plant and animal species in the immediate area. The EA details the effects of the action alternatives. None of the effects identified from the proposed action, including cumulative effects, are considered to be significant and do not exceed those effects described in the Resource Management Plan.

Intensity: I have considered the potential intensity/severity of the impacts anticipated from the proposed action to permit drilling thirty-eight (38) new oil and monitoring wells, which would also include the construction of temporary drilling sumps, and a temporary staging area for equipment and testing of produced fluids in the Midway Sunset Oilfield. The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27. The discussions below apply to all project elements contained within the EA:

1. **Impacts may be both beneficial and adverse and a significant effect may exist regardless of the perceived balance of effects.** Potential impacts include the emission of air pollutants, soil disturbance, destruction of habitat for federally listed species, and degradation of fossil resources. However, none of these impacts would be significant at the local scale or cumulatively because of the small scale of the project and design features that would reduce impacts to immeasurable levels. Air emissions would be below *de minimis* levels; soils would be preserved during construction and would be restored to the extent possible once the proposed action concludes; listed species habitat destruction would be minimized and compensated for according to the terms of the applicable biological opinion.

2. **The degree to which the selected alternative would affect public health or safety.** The proposed project is comparable to other similar activities and projects already undertaken on BLM-administered lands within the Bakersfield Field Office and nationwide with no unusual health or safety concerns. All operators are subject to the standards outlined in the California Occupation Safety and Health Plan, and the State must conduct inspections to enforce its standards and must operate occupational safety and health training and education programs. Also, operators must comply with federal safety regulations outlined in 43 CFR 3160 and the Onshore Oil and Gas Orders. Implementation of measures to meet these standards and regulations would minimize risks to public health and safety; therefore, any impacts to public health and safety are not considered significant. As explained in the EA, well stimulation technologies will not have an adverse impact on public health and safety. In addition, as discussed in the EA, well stimulation will not constitute a meaningful increase to project emissions and would not contribute to the exceedance of *de minimus* air quality thresholds. The project will incorporate mitigation measures required by CDOGGR to reduce or eliminate adverse impacts to drilling and well stimulation due to naturally occurring seismic activity.

3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wild and scenic rivers, or ecologically critical areas**. No park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas would be adversely affected by the proposed development. The project area has been

surveyed and analyzed for biological, historical, paleontological and cultural resources. No historical or cultural resources were identified within the area of potential effect, and a mitigation plan is in place to protect paleontological resources located on BLM surface lands and cultural resources identified through inadvertent discovery. Biological resources would not be significantly affected because Berry would implement the USFWS-approved Project Specific Provisions to mitigate for impacts to threatened and endangered species. Berry would compensate for unavoidable impacts to listed species habitat by dedicating lands for the permanent conservation of in-kind habitat.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** It is highly unlikely that any portion of the analyzed action would be controversial. Similar actions are commonplace in the area and draw little controversy. Oil development has occurred within the San Joaquin Valley region for over 100 years. Although the use of well stimulation could raise public concern, the use of hydraulic fracturing for these wells, at this time is merely hypothetical and may never be employed. If the use of hydraulic fracturing is employed to stimulate production from these wells, it would be authorized and regulated by the California Division of Oil, Gas, and Geothermal Resources (CDOGGR). The effects of hydraulic fracturing as a well stimulation technique has been analyzed under the California Senate Bill No. 4 Environmental Impact Report (EIR), which has been considered by and which adds to BLM's scientific understanding of well stimulation techniques. Using best available scientific information, including information retrieved from the EIR, the Environmental Assessment concludes that the proposed action, including the potential use of well stimulation techniques after the well is drilled, would not lead to significant impacts and is thus not likely to be highly controversial.

5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The proposed project is not unique or unusual. The BLM has experience implementing similar projects in similar areas and have found effects to be reasonably predictable. In addition, well stimulation has been practiced in the San Joaquin Valley for over 50 years. The effects of well stimulation have been analyzed in the CDOGGR EIR and in this EA. There are no predicted effects on the human environment which are considered to be highly uncertain or involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. The proposed project does not set a precedent for future actions that may have significant effects. The proposed project is limited to the drilling of thirty-eight (38) new oil and monitoring wells, which would also include the construction of temporary drilling sumps, and a temporary staging area for equipment and testing of produced fluids. It also includes the reasonably foreseeable potential for the nineteen (19) producing wells to be stimulated. Any future proposals submitted within the project area would be considered independently and be subject to site specific NEPA analysis and documentation.

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The EA identified the potential for cumulative effects of the Project for the following resources: Air Quality, Biological Resources, Cultural Resources, Native American Values, Paleontological Resources, Soil Resources and Geology, and Water Quality and Quantity.

For the following resources, the BLM determined that the following resources were not impacted, or the impacts were so highly localized that they would not contribute to cumulative impacts: Air Quality, Cultural Resources, Native American Values, Paleontological Resources, Soil Resources and Geology, and Water Quality and Quantity.

For Biological Resources, the BLM determined that cumulative impacts were less than significant, and compliance with that Biological Opinion and other applicable laws, regulations, and policies, would prevent significant cumulative effects to biological resources.

8**. Section 106 of the National Historic Preservation Act (NHPA) requires agencies to make a reasonable and good faith effort to identify historic properties that may be affected by an agency's undertakings and take those effects into account in making decisions. The BLM process for implementing this NHPA requirement is set forth in the *State Protocol Agreement Among the California State Director of the Bureau of Land Management and the California State Preservation Officer and the Nevada State Historic Preservation Officer (2019)*.** A cultural resources inventory had been previously conducted for the area of potential effect for the proposed project (BLM Cultural Resource Inventory Report #CA-C/V-467). No cultural resources or historic properties were identified within the project area. There will be no impact to cultural resources as a result of the proposed action. Tribal notification and coordination was conducted for potential future development within an area which includes the project locations (TNL 19-15). No places of cultural importance to Native American tribes were identified within the project areas as a result of this coordination.

<u>Paleontological Resources Preservation Act</u>

This Act was passed as part of the Omnibus Public Lands Management Act of 2009, and requires Interior agencies as well as the Forest Service to manage and protect paleontological resources on Federal land. This includes developing plans for the inventory, monitoring, and scientific and educational use of paleontological resources. The Act also describes criteria for issuing permits to collect and study paleontological resources on Federal land. The project area is underlain by the Tulare Formation and other paleontologically sensitive Alluvial Deposits. All of these have a high potential for fossil resources (PFYC 4) BLM Paleontological Resource Inventory Report # 6000-2019-03P). There has been extensive cut and fill grading within portions of the project area. As a result, certain locations consist entirely of highly disturbed fill material, which has no potential for the presence of intact fossil remains. These locations have been mapped and it has been determined that several of the proposed projects are within these areas. These include wells Southwestern HP-21, HP23, HP-25, HP-27, HP-29, HP31, 60-61, 62-59, 63-60, and 64-61. Those wells which are located within non-fill paleontologically sensitive areas include Southwestern HP-22, HP-24, HP-26, HP-28, HP30, HP-32, 56-61, 56-63, 57-60, 57-62, 58-59, 58-61, 58-63, 59-58, 59-60, 59-62, 60-59, 60-63, 61-58, 61-60, 61-62, 61-64, 62-61, 62-63, 63-62, 63-64, 64-63, & 64-65.

9. **The degree to which the action may adversely affect an endangered or threatened species or its designated critical habitat under the Endangered Species Act of 1973.** The proposed action would not have significant impacts to listed species or critical habitat. The Design Features would minimize the potential for unintended or undue impacts to San Joaquin kit fox. Berry's

dedication of their private, conserved lands for the permanent conservation of listed species habitat will compensate for unavoidable impacts to listed species. There is no designated critical habitat in the project area.

10. **Whether the action threatens to violate; Federal, State, or local law or requirements for the protection of the environment**. This action would not violate federal, state, or local laws or requirements. The proposed action is fully consistent with the 2014 Bakersfield Resource Management Plan. The EA is in full compliance with the National Environmental Policy Act of 1969 and is consistent with the Federal Land Policy and Management Act of 1976, as amended. Approval of the proposed action would not result in undue or unnecessary resource degradation due to operator compliance with State and Federal regulations, the Lease Terms, the Design Features, spill prevention and control plans, and the Oil and Gas Programmatic Biological Opinion Project Specific Provisions.

Prepared by:	/s/ Matt Thomas	7/8/2019
	Project Lead	Date
Approved by:	/s/ Kevin Coodey	7/8/2019
	Assistant Field Manager	Date