

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Denbury Well # MC31-16SH &NH
<b>Proposed Implementation Date:</b>	2019
<b>Proponent:</b>	Denbury Onshore LLC
<b>Location:</b>	T6N-R60E-Sec 16 NWNE
<b>County:</b>	Fallon

### I. TYPE AND PURPOSE OF ACTION

Denbury Onshore LLC henceforth referred to as proponent has requested to construct two co-located oil wells, pad site, pipeline and access road on the section of Trust Land mentioned above. This section of land is managed by the Montana Department of Natural Resources Eastern Land Office. This oil well will be in the Cedar Creek Coral Creek Unit. The well depth will be approximately 12,550 feet on the south well and 13,432 feet on the north well, both would be drilled into the Mission Canyon formation. These wells would be placed in common on one pad site, the total area of the pad site for drilling operations would be approximately 4.95 acres. Once drilling is completed the pad size will be reduced to 2.64 acres. Any pits will be constructed on cuts and will not be allowed on fills. Cuts will range from 0-9.9 feet. Fills will range from 0-10.1 feet.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

The proponent has completed the proper applications to begin drilling and construction of the well site. The Eastern land office has completed a field evaluation of the site and surrounding area on June 20<sup>th</sup>, 2019.

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

DNRC Board of Oil and Gas

#### 3. ALTERNATIVES CONSIDERED:

Alternative A- Allow Denbury to construct the well site and begin drilling. This alternative would continue the current land use of grazing, and mineral (Hydrocarbon) extraction. Plus allow for increased revenue to the school trust through mineral royalties. All construction of this project will be reclaimed upon termination of the well. All disturbed areas that are not part of the operation of this well will be reclaimed.

Alternative B- No Action. Current land use of grazing and mineral management would not change. Additional disturbance to soils, vegetation, wildlife and other impacts will be avoided. The value of state owned crude oil resources may not be captured to its full potential. Resources may be tapped in other areas that will draw from State owned minerals.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

Alternative A- Site is composed of mostly clay soils. Geologic features in the area include rolling hills, and prairie. Erosion risks in this area are typically moderate to high. Soil observations for the area show a minimal

risk of sheet and rill erosion. Some soil disturbance may occur at the drill site and pad through cutting and filling to level the pad and construct the access road. This disturbance should be minimal to moderate in nature. Any construction would be designed to reduce the amount of erosion on the site. Reclamation efforts would involve sloping the cuts to a natural contour, removal of scoria and reseeding the site to prevent erosion and re-establish native range species.

Alternative B- No Impact.

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#### **5. WATER QUALITY, QUANTITY AND DISTRIBUTION:**

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

Alternative A- There is potential for erosion in a heavy rain event. These sediments could potentially be carried down slope into the drainages. This can be mitigated by reseeding disturbed areas to a native grass mixture prepared by the Eastern Land Office. Other control measures may also be utilized depending on the specific needs of the site.

Alternative B- No Impact

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#### **6. AIR QUALITY:**

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

Alternative A- Pollutants and Particulates will be increased during the construction of the project. After the completion of the project pollutant and particulate levels will return to normal.

Alternative B- No Impact

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#### **7. VEGETATION COVER, QUANTITY AND QUALITY:**

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

Alternative A- There could be disruption to some of the vegetation currently growing at the site. Current plant species include, but are not limited to, Western Wheatgrass (*Agropyron smithii*), Blue Grama (*Bouteloua gracilis*), Sandberg Bluegrass (*Poa secunda*), Green Needlegrass (*Stipa viridula*), Prairie Junegrass (*Koleria pyramidata*), Inland Saltgrass (*Distichlis spicata*), and Cheatgrass (*Bromus tectorum*) and various forbs and shrubs. No rare plant species were noted during the inspection. After the reclamation has taken place the site will be seeded back to native grass species.

Alternative B- No Impact

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#### **8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

Alternative A- There could be minimal disruption to the wildlife that inhabit the area. The primary species in the area consist of antelope, mule deer, burrowing rodents, jack rabbits, raptors, migratory and prairie birds and others. The area of proposed development is located within an area of dense oil and gas production.

Alternative B- No Impact

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**9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

Alternative A- A search of the Montana Natural Heritage System Database shows six species of concern noted within the general project area. These species include Brewer's Sparrow (*Spizella breweri*), Chestnut-collared Longspur (*Calcarius ornatus*), Great Blue Heron (*Ardea Herodias*), Greater Sage-Grouse (*Centrocercus urophasianus*), Loggerhead Shrike (*Lanius ludovicianus*), and Red-headed Woodpecker (*Melanerpes erythrocephalus*). The project is located within Greater Sage Grouse Core Habitat, the proponent has received consultation and a mitigation plan back from the Montana Sage Grouse Habitat Conservation Program (Project #3461).

Alternative B- No Impact

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

Alternative A- A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because the Holocene age soils in the APE are relatively thin, and because the local geology is not likely to produce caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Alternative B- No Impact

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**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

Alternative A- This would change the appearance of the landscape, through the addition of an oil well and associated pad site. Noise levels may be increased during the construction of the pad and subsequent drilling process of the well but should be reduced once the drilling process is completed. This pad is located within an area of dense oil and gas development but is not located within a densely populated area. Total impacts to aesthetics should be minimal.

Alternative B- No Impact

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**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

Alternative A-This project would have an effect on the amount of limited resources in the area. The amount of oil to be extracted is currently unknown. The project is located within a unitized field, any oil extraction would be a part of that specific unit agreement.

Alternative B- No Impact

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**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

None

#### IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

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#### 14. HUMAN HEALTH AND SAFETY:

*Identify any health and safety risks posed by the project.*

Alternative A- There may be potential safety risks for laborers, but the potential risk is minimal with proper safety efforts.

Alternative B- No Impact

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#### 15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

*Identify how the project would add to or alter these activities.*

Alternative A- It would have a positive effect on industrial, commercial activities and production in the area. It should have a neutral effect to agricultural activities.

Alternative B- No Impact

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#### 16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

Alternative A- This project has the potential to create jobs with further development possibilities.

Alternative B- No Impact

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#### 17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

Alternative A- Potential local and state tax revenue may be increased by this project. The amount of this potential increase is unknown at this time.

Alternative B- No Impact

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#### 18. DEMAND FOR GOVERNMENT SERVICES:

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services*

Alternative A- Traffic in the general area may be slightly increased by this project. The project is located in an area with dense oil and gas development and day to day operational traffic in the area is common. No demand for additional government services is expected.

Alternative B- No Impact

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#### 19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

Alternative A- No Impact

Alternative B- No Impact

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**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

Alternative A- No significant impacts are expected to access and quality of recreational activities. The proposed project is located within a long established dense oil and gas producing area.

Alternative B- No Impact

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**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

Alternative A- No Impact Expected

Alternative B- No Impact

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**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

Alternative A- No Impact Expected

Alternative B- No Impact

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

Alternative A- No Impact Expected

Alternative B- No Impact

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**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

Alternative A- The proposed project should result in an increased income from oil and gas royalty revenues within the unit of which this tract of trust land is a part. The amount of this increase is unknown currently.

Alternative B- No Impact

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Scott Aye	<b>Date:</b> 07-16-2019
	<b>Title:</b> Land Program Manager	

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**V. FINDING**

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**25. ALTERNATIVE SELECTED:**

Alternative A

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**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The granting of the requested oil well and associated pad site, access road and flowline upon state owned trust lands for the proposed Denbury Onshore well #MC31-16SH&NH should not result in nor cause significant environmental impacts. The proposed action satisfies the trusts fiduciary mandate and ensures the long-term productivity of the land. An environmental assessment checklist is the appropriate level of analysis for the proposed action

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**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS

More Detailed EA

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Chris Pileski
	<b>Title:</b> Eastern Land Office; Area Manager
<b>Signature:</b> /s/ Chris Pileski	<b>Date:</b> 7-23-2019