

# CHECKLIST ENVIRONMENTAL ASSESSMENT

**Proposed Action:** Approve Drilling Permit (Form 22)  
**Project/Well Name:** Unit 12-15H  
**Operator:** Denbury Onshore, LLC  
  
**Location:** T8S, R54E, Sec 12 SW SE  
**County:** Powder River MT; **Field (or Wildcat):** Bell Creek  
  
**Proposed Project Date:** 09/01/2022

## I. DESCRIPTION OF ACTION

Denbury plans to drill a horizontal well as a producer in the tertiary CO<sub>2</sub>/Waterflood program. The TVD of this well is 4,471' and MD is 8,834'. Objective formation is the Muddy Sandstone. Solids will be contained in metal pits and then hauled to a licensed disposal facility. Surface casing to be set at 1,000' and will be cemented back to surface.

## II. PROJECT DEVELOPMENT

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

Montana Bureau of Mines and Geology, GWIC website (Powder River County Wells).

US Fish and Wildlife, Region 6 website  
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA  
COUNTIES, Powder River County

Montana Natural Heritage Program Website (FWP)  
Heritage State Rank= S1, S2, S3, T8S R54E

Montana Cadastral Website  
Surface Ownership and surface use Section 12 T8S R54E

Montana Department of Natural Resources MEPA Submittal

### 2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be drilled.

Action Alternative: Denbury would have permission to drill well.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No.

Unusually deep drilling (high horsepower rig): No.

Possible H<sub>2</sub>S gas production: None anticipated

In/near Class I air quality area: No

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211. AQB review.

Comments: No special concerns – using rig to drill to 4,471' TVD, 8,834' MD. If there are no gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

#### 4. WATER QUALITY

Salt/oil based mud: Freshwater and freshwater mud system for drilling surface hole (Rule 36.22.1001).

Freshwater mud system for intermediate and horizontal sections.

High water table: No

Surface drainage leads to live water: No. An unnamed ephemeral drainage is located about 425' to the north and is upgrade from location. Another ephemeral drainage is located about 2/5 of a mile to the south.

Water well contamination: No water wells within a ½ mile radius.

Porous/permeable soils: No, sandy clay.

Class I stream drainage: No.

Groundwater vulnerability area: No.

Mitigation:

Lined reserve pit

Adequate surface casing

Berms/dykes, re-routed drainage

Closed mud system

Off-site disposal of **solids**/liquids (in approved facility)

Comments:

#### 5. SOILS/VEGETATION/LAND USE

Vegetation: Grassland.

Stream crossings: No

High erosion potential: Yes, large cut of 22' and large fill of 20.4' required.  
Loss of soil productivity: No

Unusually large wellsite (Describe dimensions): A large location of 400' X 425'.

Damage to improvements: No.

Conflict with existing land use/values: None.

Mitigation

- Avoid improvements (topographic tolerance)
- Exception location requested
- Stockpile topsoil
- Stream Crossing Permit (other agency review)
- Reclaim unused part of wellsite if productive
- Special construction methods to enhance reclamation

Access Road: MT 544 Boyles South Rd and existing dirt road.

Drilling fluids/solids: Solids will be contained in metal pits and then hauled to a licensed disposal facility.

## **6. HEALTH HAZARDS/NOISE**

Proximity to public facilities/residences: No residences within a ½ mile radius.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: 3 to 5 days.

Mitigation:

- Proper BOP equipment
- Topographic sound barriers
- H2S contingency and/or evacuation plan
- Special equipment/procedures requirements
- Other:

## **7. WILDLIFE/RECREATION**

Sage Grouse: NA.

Proximity to sensitive wildlife areas (DFWP identified): None.

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: No.

Conflict with game range/refuge management: No.

Threatened or endangered Species: Species listed as endangered or threatened are the Whooping Crane, Pallid Sturgeon, Black-footed Ferret, and the Northern Long-eared Bat. The Montana Natural Heritage Program lists three (3) species of concern: the Black-tailed Prairie Dog, Greater Sage-Grouse, and the Ferruginous Hawk.

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DNRC Trust Lands, Sage Grouse Habitat Conservation Program)
- Screening/fencing of pits, drillsite
- Other:

Comments: Private grazing surface lands. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

**IV. IMPACTS ON THE HUMAN POPULATION**

**8. HISTORICAL/CULTURAL/PALEONTOLOGICAL**

Proximity to known sites:

Mitigation

- avoidance (topographic tolerance, location exception)
- other agency review (SHPO, DNRC Trust Lands, federal agencies)

Other:

**9. SOCIAL/ECONOMIC**

Substantial effect on tax base

- Create demand for new governmental services
- Population increase or relocation

Comments: No concerns.

**IV. SUMMARY**

No long term impacts expected. Some short term impacts will occur, but can be mitigated. I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> John Gizicki <b>Title:</b> Compliance Specialist	<b>Date:</b> 08/12/22
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