

## CHECKLIST ENVIRONMENTAL ASSESMENT

**Proposed Action:** Approve Drilling Permit (Form 22)

**Project/Well Name:** Unit 24-04

**Operator:** Denbury Onshore, LLC

**Location:** 8S-54E-24 NWNW

**County:** Powder River MT; **Field (or Wildcat):** Bell Creek

**Proposed Project Date:** 07/01/2017

### I. DESCRIPTION OF ACTION

Denbury plans to re-enter this well to re-plug and abandon. The TD of this vertical well is 4,682' in the Muddy Sand Formation. Field saltwater is the type of fluid that will be used. Fluids and solids will be contained in workover rig tanks.

### 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 24 T8S R54E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be re-entered.

Action Alternative: Denbury would have permission to re-enter 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

Comments: No special concerns – using small rig to re-enter 4,682' TD to re-plug the well.

#### 4. WATER QUALITY

Salt/oil based mud: Yes, salt.

High water table: No

Surface drainage leads to live water: Blowout Creek is located about 2/5 of a mile to the north.

Water well contamination: No. Closest water wells are about a mile to the southeast and 4/5 of a mile to the south. Depths of these stockwater wells are 240' and 280'.

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: Grass land.

Steam crossings: No  
High erosion potential: No  
Loss of soil productivity: No

Unusually large wellsite (Describe dimensions): No location will be built.

Damage to improvements: No.

Conflict with existing land use/values:

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:

Drilling fluids/solids:

## 6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Closest residence is 7/10 of a mile to the southeast.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: Short amount of time as only cement plugs need to be drilled out.

Mitigation:

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

## 7. WILDLIFE/RECREATION

Sage Grouse: In General Habitat. Program received May 31, 2017

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, and the Northern Long-eared Bat. The Montana Natural Heritage Program lists two (2) species of concern: the Black-tailed Prairie Dog and the Ferruginous Hawk.

Mitigation:

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

Comments: Private cultivated surface lands.

**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> 06/01/17
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