

## CHECKLIST ENVIRONMENTAL ASSESMENT

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

**Project/Well Name:** Kittleson 3-5

**Operator:** Hydra MT, LLC

**Location:** NW NE Section 5 T25N-R59E

**County:** Richland **MT;** **Field (or Wildcat):** Cattails

**Proposed Project Date:** 11/15/2017

### I. DESCRIPTION OF ACTION

Hydra MT LLC plans to re-enter the plugged and abandoned well to use as a class II injection well in the Dakota Formation. No dirt work anticipated at this location other than digging up existing casing. Surface casing is set at 1,694'. Brine will be used for drilling out the plugs. Proposed Packer depth is 5,350'. Cast iron bridge plug to be set at 5,920'.

### II. PROJECT DEVELOPMENT

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

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

US Fish and Wildlife, Region 6 website

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Richland County

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T25N R59E

Montana Cadastral Website

Surface Ownership and surface use Section 5 T25N R59E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be re-entered for use as a class II injection well.

Action Alternative: Hydra MT LLC would have permission to re-enter the well for use as a class II injection well.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No, 2-3 days.  
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: No, this is a disposal well.

Comments: No special concerns – using rig to re-enter to 5,920' TD for use as a class II injection well.

#### 4. WATER QUALITY

Salt/oil based mud: Brine will be used to drill out plugs.  
High water table: No.  
Surface drainage leads to live water: No, the nearest drainage is an unnamed ephemeral drainage 3/10 of a mile to the west.

Water well contamination: GWIC reports that there are two domestic water wells 3/10 of a mile to the southwest with depths of 60' and 110'. (Surface casing of re-entry well is cemented to 1,694').

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: Steel surface casing is set at 1,694' to protect ground water. (Rule 36.22.1001).

## 5. SOILS/VEGETATION/LAND USE

Vegetation: Cultivated land.

Steam crossings: None anticipated.

High erosion potential: No dirt work to be done.

Loss of soil productivity: No, location to be restored after drilling, if plugged.

Unusually large wellsite (Describe dimensions): Existing reclaimed well location. Only disturbance will be digging up casing and setting up work over rig.

Damage to improvements: None.

Conflict with existing land use/values: Slight.

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: Access will be off road 142.

Drilling fluids/solids: Will be drilling out cement plugs, utilizing tanks for drilling mud.

## 6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: No residences within a ½ mile radius. Nearest town is Fairview, MT and is about 7 miles to the south east.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: Workover rig, 2-3 days drilling time.

Mitigation:

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

## 7. WILDLIFE/RECREATION

Sage Grouse: No.

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

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Species listed as threatened or endangered in Richland County, MT are the Pallid Sturgeon, Piping Plover, Interior Least Tern, Whooping Crane, and Northern Long-eared Bat. The Montana Natural Heritage Program lists three (3) species of concern, Whooping Crane, Northern Redbelly Dace, and the Iowa Darter.

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. 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.

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| <b>EA Checklist<br/>Prepared By:</b> | <b>Name:</b> John Gizicki<br><b>Title:</b> Compliance Specialist | <b>Date:</b> 11/13/17 |
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