

## CHECKLIST ENVIRONMENTAL ASSESSMENT

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

**Project/Well Name:** O'Connor 20-34

**Operator:** TSAVOIL, LLC

**Location:** NE SE Section 20 28N-51E

**County:** Roosevelt **MT;** **Field (or Wildcat):** Wildcat

**Proposed Project Date:** 08/5/2020

### I. DESCRIPTION OF ACTION

TSAVOIL, LLC plans to drill an 8,200' TVD / 8,254.39' MD well with the objective formation being the Interlake.

### II. PROJECT DEVELOPMENT

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

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

US Fish and Wildlife, Region 6 website

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

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T28N R51E

Montana Cadastral Website

Surface Ownership and surface use Section 22 T28N R51E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

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

Action Alternative: TSAVOIL, LLC would have permission to drill the well.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No, 3-4 days.

Unusually deep drilling (high horsepower rig): No.

Possible H<sub>2</sub>S gas production: Slight chance H<sub>2</sub>S gas from Mississippian Formations.

In/near Class I air quality area: Yes, located within Fort Peck Indian Reservation.

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 small rig to drill to 8,200' TVD / 8,254.39' MD well. 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: Fresh water based drilling fluids system will be utilized on surface hole, will then switch to salt based mud.

High water table: No.

Surface drainage leads to live water: Potentially, closest drainage is an unnamed ephemeral drainage located about 150' to the north. This drainage leads to Poplar River, which is located about 7/10 of a mile to the southwest.

Water well contamination: This information is according to Montana's Ground-Water Information Center. A stockwater well is located about 9/10 of a mile to the northwest and is 40' deep. A domestic well is located about 3/5 of a mile to the northeast and is 91' deep. Several monitoring wells are listed in sections 21 and 28. A domestic water well is located about 3/5 of a mile to the south and is 72' deep. A domestic water well is located about 3/5 of a mile to the southwest and is 50' deep. A domestic water well is located about 7/10 of a mile to the southwest and is 58' deep. A domestic water well is located about 4/5 of a mile to the southwest and is 32' deep. Surface hole in this well will be drilled to 1,500' with freshwater based drilling fluid. Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001).

Porous/permeable soils: No, sandy silty bentonitic soils.

Class I stream drainage: None.

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 to 1,500' and cemented to surface to protect ground water. (Rule 36.22.1001).

## 5. SOILS/VEGETATION/LAND USE

Vegetation: Grassland

Stream crossings: None.

High erosion potential: No, medium cut of 10.40' required and small fill, up to 1.91', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive.

Unusually large wellsite (Describe dimensions): No, 310' X 300' location size.

Damage to improvements: Slight, surface use is a spring wheat field.

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: Location access is off road BIA Rd 75. A new access road of 1,090' will be built off existing road.

Drilling fluids/solids: Drilling fluids and cuttings will be trucked and disposed of in an approved commercial salt water disposal system. No pits.

## 6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Nearest residence is 3/5 of a mile to the southwest.

Possibility of H2S: Slight chance H2S gas from Mississippian Formations.

Size of rig/length of drilling time: 3-4 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 identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: None identified.

Conflict with game range/refuge management: None identified.

Threatened or endangered Species: Only species identified as threatened or endangered is the Pallid Sturgeon, Piping Plover, Interior Least Tern, Whooping Crane, Red Knot, Northern Long-eared Bat. The Montana Natural Heritage Program lists eleven (11) species of concern: Eastern Red Bat, Hoary Bat, Little Brown Myotis, Chestnut-collared Longspur, Baird's Sparrow, Bobolink, Smooth Greensnake, Northern Redbelly Dace, Northern Pearl Dace, Sauger, and Pallid Sturgeon.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DNRC Trust Lands, Montana Sage Grouse Habitat Conservation Program)

Screening/fencing of pits, drillsite

Other:

Comments: Private cultivated surface lands. There may be species of concern that may be 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: No 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.

EA Checklist  
Prepared By:

Name: John Gizicki  
Title: Compliance Specialist

Date: 07/24/20