

CHECKLIST ENVIRONMENTAL ASSESSMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Simmons 21-23

Operator: TSAVOIL, LLC

Location: NE SW Section 21 29N-50E

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

Proposed Project Date: 07/15/2020

I. DESCRIPTION OF ACTION

TSAVOIL, LLC plans to drill an 8,000' MD/TVD well with the objective formation being the Duperow.

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, T29N R50E

Montana Cadastral Website

Surface Ownership and surface use Section 21 T29N R50E

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 H₂S gas production: Slight chance H₂S 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 8,000' MD/TVD. 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 Badger Creek 1/5 of a mile to the west. A pond exists 3/5 of a mile to the southwest.

Water well contamination: No water wells within a 1/2-mile radius. 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: Only ephemeral drainages.

High erosion potential: No, small cut of 2.92' required and small fill, up to 0.29', 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 grassland.

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 Hwy 514. A new access road of 1/2 of a mile 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: No residences within a 1-mile radius.

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 six (6) species of concern: Eastern Red Bat, Hoary Bat, Little Brown Myotis, Sprague's Pipit, Chestnut-collared Longspur, and Bobolink.

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 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: 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: 06/16/20