

CHECKLIST ENVIRONMENTAL ASSESSMENT

Proposed Action: Approve Drilling Permit (Form 22)
Project/Well Name: Prewitt 41X-28
Operator: White Rock Oil & Gas, LLC
Location: NE NE Section 28 T22N-R59E
County: Richland MT; **Field (or Wildcat):** Wildcat Richland
Proposed Project Date: 6/10/2024

I. DESCRIPTION OF ACTION

Triple derrick drilling rig to drill a single lateral horizontal Bakken Formation test, 26,154' MD/10,203'TVD.

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, T22N R59E

Montana Cadastral Website
Surface Ownership and surface use Section 28 T22N R59E

Montana Department of Natural Resources MEPA Submittal

2. ALTERNATIVES CONSIDERED

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

Action Alternative: White Rock Oil & Gas, LLC would have permission to drill the well.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: No, 5-10 days.

Unusually deep drilling (high horsepower rig): No

Possible H2S gas production: Potentially in Mississippian formations.

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 – Triple derrick drilling rig to drill a single lateral horizontal Bakken Formation test, 26,154' MD/10,203' 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: Will drill with oil based invert drilling fluids for the intermediate casing hole. Horizontal hole will be drilled with saltwater. Surface casing hole will be drilled with freshwater and freshwater mud system, Rule 36.22.100.1

Surface drainage leads to live water: No, there is an unnamed ephemeral drainage about 200 ft to the west from the proposed location.

Water well contamination: No, GWIC lists a domestic water well that is 235 ft deep about 0.45 miles to the south. A Stockwater well 92 ft deep is located about 0.46 miles to the southeast. A Fox Hills domestic water well is located about 1/5 of a mile to the north and is 1,320 ft deep. A 110 ft stockwater well is located about 0.45 miles to the northeast.

Porous/permeable soils: Slight, gravelly 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 to be set at 2,200' to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Grasslands.

Stream crossings: None anticipated.

High erosion potential: No, medium cut of 14.8' and a small fill of 8.8' required.

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

Unusually large wellsite (Describe dimensions): No, large wellsite for a single well pad, 325' by 425'.

Damage to improvements: Slight.

Conflict with existing land use/values: Slight, grasslands.

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 of Hwy 200 and Hwy 261. Access road will be through existing well pad.

Drilling fluids/solids: Using a closed loop system. Cuttings will be hauled off to be disposed of at a State approved disposal facility. Excess fluids will be returned to the mud system prior to transport.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: A residence is located about 1,000 ft to the north of proposed location. This requires operator to notify owner of dwelling of their application for a permit to drill per ARM 36.22.620.

Possibility of H2S: Possibility in Mississippian formations.

Size of rig/length of drilling time: Triple derrick, 5-10 days.

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, Yellow-billed Cuckoo, Piping Plover, Whooping Crane, and Northern Myotis.

The Montana Natural Heritage Program lists nineteen (19) species of concern, the Hoary Bat, Townsend's Big-eared Bat, Bald Eagle, Black-billed Cuckoo, Bobolink, Great Blue Heron, Least Tern, Whooping Crane, Snapping Turtle, Spiny Softshell, Blue sucker, Paddlefish, Pallid Sturgeon, Sauger, Shortnose Gar, Sicklefin Chub, Sturgeon Chub, Gray Comma, Pale-spiked Lobelia.

Mitigation:

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

Comments: Private grasslands. 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: The Board of Oil & Gas has no jurisdiction over private surface lands.

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: Chief Field Inspector

Date: 5/15/24