

CHECKLIST ENVIRONMENTAL ASSESSMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: East Poplar 22-2

Operator: CWT Operating, LLC

Location: W2 SW Section 22 28N-51E

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

Proposed Project Date: 06/20/2022

I. DESCRIPTION OF ACTION

CWT Operating, LLC plans to drill a 7,900' TVD / MD well with the objective formation being the Duperow or Nisku, depending on Duperow production test.

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: CWT Operating, 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 7,900' TVD / MD. 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 for the main hole.

High water table: No.

Surface drainage leads to live water: No drainages nearby.

Water well contamination: This information is according to Montana's Ground-Water Information Center; A domestic water well with a depth of 85' is located about 3/10 of a mile to the southeast. 16 monitoring wells are listed in section 22. Two domestic water wells 124' and 134' deep (listed as abandoned) are located about 3/10 of a mile to the southwest. Another domestic water well 137' deep is located about 3/10 of a mile to the southwest. Steel surface casing will be set to 1,200' and cemented to surface to protect ground water. (Rule 36.22.1001).

Porous/permeable soils: Yes, sandy 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 to be set to 1,200' and cemented to surface to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Spring wheat.

Stream crossings: None.

High erosion potential: No, small cut of 1.3' required and small fill, up to 0.1', required.

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

Unusually large wellsite (Describe dimensions): Large 400' X 300' location size for two wells.

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 2058. A new access of 493' will be used to access the location off of Road 2058.

Drilling fluids/solids: No Reserve pit. Drill cuttings will be stored in steel pits. After drilling operations are completed, the cuttings will be hauled off and disposed of at the Wisco Disposal site in North Dakota.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Nearest residence is just over ¼ of a mile to the southeast.

Another residence is located just over ¼ 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 in Roosevelt County are the Pallid Sturgeon, Piping Plover, Whooping Crane, Red Knot, Northern Long-eared Bat and the Monarch Butterfly. The Montana Natural Heritage Program lists thirteen (13) species of concern: Eastern Red Bat, Hoary Bat, Long-eared Myotis, Little Brown Myotis, Sprague's Pipit, 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:**

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Date: 04/27/22