

CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Philipps 7-5

Operator: MCR, LLC

Location: T27N, R4W, Sec 5 NW NW

County: Phillips MT; **Field (or Wildcat):** Pondera

Proposed Project Date: November 2019

I. DESCRIPTION OF ACTION

MCR, LLC plans to drill a vertical oil well on private land with an objective formation being the Madison. The proposed total depth is 2,115' TVD/MD. The surface hole will be drilled to 300' with a freshwater mud system, Rule 36.22.1001.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED

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

US Fish and Wildlife, Region 6 website

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

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T27N R4W

Montana Cadastral Website

Surface Ownership and surface use Section 5 T27N R4W

Montana Department of Natural Resources MEPA Submittal

2. ALTERNATIVES CONSIDERED

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

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

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: Not anticipated
Unusually deep drilling (high horsepower rig): No.

Possible H₂S gas production: Yes, possible H₂S gas, slight chance from Mississippian Formations.
In/near Class I air quality area: No Class I air quality area in the area of review.
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 2,115' 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: No. Freshwater mud system / air drilling to be used.
High water table: No.
Surface drainage leads to live water: No. An unnamed ephemeral drainage is located about 1/4 of a mile to the west.

Water well contamination: No water wells in 1/2 mile radius.

Porous/permeable soils: Slightly, gravely clay.
Class I stream drainage: No class I streams in the area.
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 will be run and cemented to surface to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Area is a cultivated field.
Stream crossings: No stream crossings anticipated.
High erosion potential: No, A small cut of 3.3' and a small fill of 4.5' required.
Loss of soil productivity: No, location will be restored after drilling if nonproductive.

Unusually large wellsite (Describe dimensions): No, 200' X 200' location.

Damage to improvements: Slight, surface use is a cultivated 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: Midway Road West and existing trail.

Drilling fluids/solids: Cuttings to be buried in pit on location.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: No residents within a ½ mile radius.

Possibility of H2S: Yes possible H2S gas, slight chance from Mississippian Formations.

Size of rig/length of drilling time: Small 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: NA

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

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: No.

Conflict with game range/refuge management: No.

Threatened or endangered Species: Species listed as endangered or threatened in Pondera County are the Grizzly Bear, Piping Plover, and Canada Lynx. Potential species of concern is the Wolverine and candidate specie is the Whitebark Pine. The Montana Natural Heritage Program website lists one (1) species of concern: Grizzly Bear.

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 L, 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
Signature:	Date: 10/29/19