

## CHECKLIST ENVIRONMENTAL ASSESMENT

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

**Project/Well Name:** Stockade-Calesto 33-3-HSU

**Operator:** Enerplus Resources (USA) Corporation

**Location:** NENW Section 33 25N 54E

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

**Proposed Project Date:** 8/1/2020

### I. DESCRIPTION OF ACTION

Triple derrick rig 16,073' MD/9,724' TVD Bakken Formation horizontal well test. Surface casing to be set at 1,520'.

### 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, T25N R54E

Montana Cadastral Website

Surface Ownership and surface use Section 33 T25N R54E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

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

Action Alternative: Enerplus Resources (USA) Corporation would have permission to drill the well

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No, normal drilling time 20 to 30 days.

Unusually deep drilling (high horsepower rig): No.

Possible H<sub>2</sub>S gas production: Yes, slight H<sub>2</sub>S possible from Mississippian Formations.

In/near Class I air quality area: No Class I air quality area in 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 triple derrick 16,073' MD/9,724' TVD Bakken Formation horizontal well test. 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: Yes, oil based invert drilling fluids will be used from 2,000' to 16,073'. Surface casing will be drilled with freshwater and freshwater mud system.

High water table: No.

Surface drainage leads to live water: No, Middle Charlie Creek is located about 1/10 of a mile to the southwest.

Water well contamination: No, GWIC lists a Stockwater well 2/5 of a mile to the northwest, this well is 60' deep, a 200' domestic water well 3/5 of a mile to the southeast, and a 24' domestic water well 3/5 of a mile to the south.

Porous/permeable soils: No, clay soils.

Class I stream drainage: No.

Groundwater vulnerability area: No.

Mitigation:

Lined cuttings 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: Grassland.

Stream crossings: None anticipated.

High erosion potential: Potentially, location requires a medium cut of 17.2' and small fill of 9.3'.

Loss of soil productivity: No, if it is a dry hole the location will be reclaimed, if well is a producer the location will be downsized to accommodate only production equipment, rest of location will be reclaimed.

Unusually large wellsite (Describe dimensions): Large wellsite to accommodate two wells, 420' X 310'.

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

Conflict with existing land use/values: Slight, surface use is a cultivated field.

### 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 Hwy 201 and CR 324. A new road of about 262' will be built into location.

Drilling fluids/solids: This will be a closed loop system.

## 6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Lambert, MT is located about 15 miles to the southeast. Nearest residence is 3/5 of a mile to the south.

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

Size of rig/length of drilling time: Triple derrick rig, 20-30 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: No.

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

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 are: Pallid Sturgeon, Piping Plover, Interior Least Tern, Whooping Crane, Red Knot, and the Northern Long-eared Bat. The Montana Natural Heritage Program site lists two-hundred and eleven (211) species of concern, ninety-seven (97) potential species of concern, and two (2) special status species in Richland County. The list is attached.

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: None.

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.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> John Gizicki	<b>Date:</b> 06/26/19
	<b>Title:</b> Compliance Specialist	