

**Montana Board of Oil and Gas Conservation  
Environmental Assessment**

**Operator:** Enerplus Resources (USA) Corporation  
**Well Name/Number:** Foghorn-Ervin 20-3 HLID3  
**Location:** NE NW Section 20 T23N R58E  
**County:** Richland, MT; Field (or Wildcat) Wildcat

**Air Quality**

(possible concerns)

Long drilling time: No, 30-40 days drilling time.  
Unusually deep drilling (high horsepower rig): No, will use a triple derrick rig 1000 HP to drill a Bakken Formation, single lateral horizontal well, 10,514'TVD/20,153'MD.  
Possible H2S gas production: Slight  
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.

Mitigation:

- Air quality permit (AQB review)
- Gas plants/pipelines available for sour gas
- Special equipment/procedures requirements
- Other: \_\_\_\_\_

Comments: Existing pipeline for gas in the area. \_\_\_\_\_

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**Water Quality**

(possible concerns)

Salt/oil based mud: Yes to long string oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.  
High water table: No  
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Lone Tree Creek, about 1/16 of a mile east of this location.  
Water well contamination: No, water wells close by. Closest water well is about 5/8 of a mile to the southeast from this location, well is only 120' in depth. All water wells are shallower than 1898'.  
Porous/permeable soils: No, silty sandy clay soils.  
Class I stream drainage: No, Class I stream drainages.

Mitigation:

- Lined reserve pit
- Adequate surface casing
- Berms/dykes, re-routed drainage
- Closed mud system
- Off-site disposal of solids/liquids (in approved facility)
- Other: \_\_\_\_\_

Comments: 1898' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment should prevent problems.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: None.  
High erosion potential: No, moderate cut, up to 15.5' and moderate fill, up to 15.5', required.  
Loss of soil productivity: None, location to be restored after drilling well if nonproductive. If productive

unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, a large well site, 450'X310'.

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

Other \_\_\_\_\_

Comments: Access is from an existing county road, #127 and well access road. About 255' of new access road will be built from county road in to the well location. Oil based invert mud will be recycled. Completion fluids will be hauled to a commercial disposal. Cuttings will be disposed of in the lined reserve pit. Pit will be solidified with subsoil in the lined pit, clean cover and top soil put over the solidified pit contents.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Residences about ¼ of a mile to the southeast, 7/8 of a mile to the south and 1 mile to the west of this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Triple drilling rig 30 to 40 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: \_\_\_\_\_

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

### Wildlife/recreation

(possible concerns)

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

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: None

Conflict with game range/refuge management: None

Threatened or endangered Species: None identified.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: \_\_\_\_\_

Comments: Private surface lands. No concerns

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### Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified.

Mitigation

avoidance (topographic tolerance, location exception)

other agency review (SHPO, DSL, federal agencies)

Other: \_\_\_\_\_

Comments: Private surface lands. No concerns.

**Social/Economic**

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns. Development well within established spacing unit.

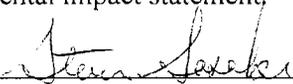
**Remarks or Special Concerns for this site**

Third horizontal Bakken well in this spacing unit.

**Summary: Evaluation of Impacts and Cumulative effects**

No, long term impacts expected. Some short term impacts will occur.

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

Prepared by (BOGC): Steven Sasaki 

(title): Chief Field Inspector

Date: February 12, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website

(Name and Agency)

Richland County water wells

(subject discussed)

February 12, 2008

(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_