

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

**Operator:** Enerplus Resources (USA) Corporation  
**Well Name/Number:** Porkey-State 16 -14-H  
**Location:** SE SW Section 16 T24 R54E  
**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) Triple derrick rig 900 HP, Bakken horizontal TVD 9,761' MD 14,078'

Possible H2S gas production slight

In/near Class I air quality area No

Air quality permit for flaring/venting (if productive) yes, if productive, DEQ air quality permit required, under rule 75-2-211.

Mitigation:

Air quality permit (AQB review)

Gas plants/pipelines available for sweet 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 salt based and 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, nearest drainage is an unnamed ephemeral drainage to West Charlie Creek which is 1/8 mile to the east of this location. This drainage meets with West Charlie Creek about 0.5 mile to the north.

Water well contamination No, all water wells close by are shallower than 1550'. Deepest water well nearby is 162' in depth.

Porous/permeable soils No, gumbo 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: 1550'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings None  
High erosion potential No, location has a moderate cut of 13.5' and a moderate fill of 21.7', 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, large well site 420'X310'  
Damage to improvements No, location to be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.  
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: Oil based muds will be recycled, cuttings will be disposed of in lined reserve pit. Access road will be by existing county road and existing trail to within 275'. About 275' of new access road will be built from existing lease road into location. No concerns.

**Health Hazards/Noise**

(possible concerns)

Proximity to public facilities/residences closest residence is 1/2 mile to the east, 1 mile north and 1 mile to the southwest 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: 1550+ is 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) n/a None identified.

Proximity to recreation sites None identified

Creation of new access to wildlife habitat No

Conflict with game range/refuge management No

Threatened or endangered Species No

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DSL)
- Screening/fencing of pits, drillsite
- Other: \_\_\_\_\_

Comments: no concerns State of Montana Trust Lands surface. Surface EA will be done by them.

**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: State of Montana Trust Lands Surface. Surface EA will be done by them.

**Social/Economic**

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns

**Remarks or Special Concerns for this site**

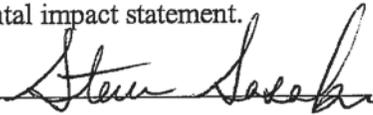
Second Bakken horizontal well in this spacing unit.

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

TVD 9,761 MD 14,078' Bakken Formation horizontal well. 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: April 4, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells

(subject discussed)

April 4, 2006

(date)

If location was inspected before permit approval:

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

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

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