

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

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Peanut-Jimmy No. 22-3-HID3
Location: NE NW Section 22 T24 R57E
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 1000 HP, Bakken Formation horizontal single lateral, 10,439'TVD/ MD 14,832'.

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.

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: Possible, closest drainage is Lone Tree Creek an ephemeral drainage, about 3/8 of a mile to the southwest of this location. Within Lone Tree Creek are ponds.

Water well contamination: None, closest water wells are about 5/8 of a mile to the south and 3/4 of a mile to the southwest of this location. All water wells close by are shallower than 1,911'. This well will have surface hole drilled with freshwater and steel surface casing set and cemented from 1,911' to protect groundwater.

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: 1,911'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to mitigate any problems.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None

High erosion potential: No, location has a small cut of 4.8' and a small fill of up to 3.2', 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: No, slight. Surface use is cultivated fields.
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, #339. About 2138' of new access road will be built from the existing county road into 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: Closest residence is about 3/4 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: 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: No

Conflict with game range/refuge management: No

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.

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: Development well in an existing well spacing unit. No concerns.

Remarks or Special Concerns for this site

Bakken Formation horizontal single lateral, 10,439'TVD/ MD 14,832'. No concerns.

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: _____