Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Porky-Synek 31-16-H
Location: SE SE Section 31 T25 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 9,606' MD 13,861'
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:
X Air quality permit (AQB review)
X 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 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 ephemeral drainage is West Charly Creek is about 1/4 mile to the west of this location.
Water well contamination No, all water wells close by are shallower than 1500'. Deepest well is in section 30 and is 665' in depth. Deepest hole is section 6 T24N R54E is 200' in depth. Surface hole will be drilled with freshwater and surface casing will be cemented back to surface from 1500'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1500'+/- 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)

Steam crossings __None___
High erosion potential __No, location has a moderate cut of 22.1' and a small fill of 7.0', 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 __Slight, unused portion of location to be restored after drilling, if productive. If nonproductive location will be restored..
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access will be over existing highway, 201 and county road, 321. A short access road off of County road 321 into location will be built. About 440' road will be built into this location. Oil based muds will be recycled, cuttings will be disposed of in a lined pit. Pit will be solidified with subsoil in the lined pit and clean cover and top soil put over the solidified pit contents.

_____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences __closest residence is 3/8 of a mile to the west and 1/2 mile to the south of this location.__
Possibility of H2S __Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:

_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __1500+ 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

_____
_____
_____

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

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

Summary: Evaluation of Impacts and Cumulative effects

TVD 9,606' MD 13,861' 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 1, 2006

Other Persons Contacted:

(Name and Agency)

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

(subject discussed)

April 2, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____