

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

Operator: Lyco Energy Corporation
Well Name/Number: Peanut-Franz 22-4-H
Location: NW 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 900 HP, Bakken horizontal MD 14,930'

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.

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 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, closest drainage is North Fork Brorson Creek an ephemeral drainage about 1/4 of a mile southwest of this location.

Water well contamination No, all water wells close by are shallower than 1950'+/-.

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: 1950'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings None

High erosion potential No, location has a moderate, cut of up to 10.5' and small fill of up to 7.6', 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 430'X310'

Damage to improvements Slight

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 and cuttings will be buried in a lined pit. Any remaining fluids will be disposed of at a commercial disposal. Access will be over existing county roads. A short access road, about 164' in length, will be built from existing county road into this location.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences closest residence is 1 mile to the southwest, 1/2 mile to the northwest, 3/4 of a mile north and east. Midway community center is 3 miles to the southeast.

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.

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

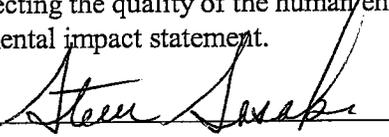
Comments: No concerns

Remarks or Special Concerns for this site

Summary: Evaluation of Impacts and Cumulative effects

TVD 10,685' MD 14,930' Bakken Formation horizontal well. No long term impacts expected, some short term impacts are expected with the drilling of this well.

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: January 31, 2006

Other Persons Contacted:

(Name and Agency)

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

(subject discussed)

January 31, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____