

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

Operator: Lyco Energy Corporation
Well Name/Number: Peabody-Minifie 26-14-H
Location SE SW Section 26 T24N R56E
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
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 require.

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, salt based and/or oil based drilling fluids to be used to drill the main hole.
Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest ephemeral drainage is Three Buttes Creek ephemeral drainage 3/8 mile to the west of this location.
Water well contamination None, all wells close by shallower than 2000'. Surface hole will be drilled with freshwater and freshwater mud.
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: 2000' is sufficient amount of surface casing to cover 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, moderate cut, up to 19.7' and moderate fill up to 17.3', required.
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive unused portion of wellsite will be reclaimed.

Unusually large wellsite No, large well site 420'X310'
Damage to improvements No, location to be restored after drilling. If productive unused portion of wellsite 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: Access will be from an existing county gravel road and existing trails. Approximately, 225' of new access road will be built into this location. Cutting will be buried in the lined reserve pit. Pit fluids will either be recycled or hauled to a commercial disposal.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences residence 3/8 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.

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

Second horizontal Bakken formation well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

Horizontal Bakken formation well TVD 10,429' MD 14,808'. No long term impacts expected. Some short term impacts will occur. Existing horizontal Bakken well in the E/2 of this section., second well in this spacing unit.

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:

Montana Bureau of Mines and Geology GWIC website

(Name and Agency)

Richland County waterwells

(subject discussed)

January 31, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____