

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

**Operator:** Lyco Energy Corporation  
**Well Name/Number:** Burning Tree-Edward No.3 26-3/25-H  
**Location:** NE NW Section 36 T25R54E  
**County:** Richland, MT; **Field (or Wildcat)** Wildcat

**Air Quality**

(possible concerns)

Long drilling time No, 40-50 days drilling time.

Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal TVD 9,760' MD 14,301'

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.

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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 Yes, nearest drainage is an unnamed tributary ephemeral drainage toe East Charlie Creek, about 1/4 of a mile to the southeast of this location and East Charlie Creek is about 3 miles to the northeast.

Water well contamination No, all water wells close by are shallower than 300'. Surface hole will be drilled with freshwater. Surface casing will be set to 1550' and cemented to surface.

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 small cut of 8.9' and a small fill of 6.5', required.

Loss of soil productivity None, location to be restored after drilling well, if well is a dryhole. If well is 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.

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 the lined pit. Fluids will be removed and recycled. Access will be over existing county roads #137, existing section line road and a short access road of about 256' will be built into this location.

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### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences closest residence is 3/8 of a mile to the northeast of this location.

Possibility of H2S Slight

Size of rig/length of drilling time Triple drilling rig 40 to 50 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: State Trust Land Surface. Trust Lands to do EA. no concerns

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### 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 Trust Land surface. Trust Lands to do EA.

**Social/Economic**

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns

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\_\_\_\_\_  
\_\_\_\_\_

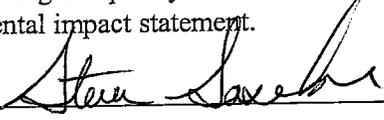
**Remarks or Special Concerns for this site**

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

TVD 9,760' MD 14,301' 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: January 27, 2006

**Other Persons Contacted:**

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\_\_\_\_\_

(Name and Agency)

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

(subject discussed)

January 27, 2006

(date)

If location was inspected before permit approval:

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

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

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