

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Lyco Energy Corporation
Well Name/Number: Buffalo-Thorton 23-4-H
Location: NW NW 23 T24N R55E
County: Richland, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)

Long drilling time no
Unusually deep drilling (high horsepower rig) no
Possible H₂S gas production No
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) no

Mitigation:

 Air quality permit (AQB review)
xx Gas plants/pipelines available for sour gas
 Special equipment/procedures requirements
 Other: _____

Comments: No special concerns

Water Quality

(possible concerns)

Salt/oil based mud Yes
High water table no
Surface drainage leads to live water no
Water well contamination no
Porous/permeable soils no
Class I stream drainage no

Mitigation:

xx Lined reserve pit
xx Adequate surface casing
 Berms/dykes, re-routed drainage
 Closed mud system
 Off-site disposal of solids/liquids (in approved facility)
 Other: _____

Comments: will use pit liner, 1700' of surface casing is adequate.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no
High erosion potential no
Loss of soil productivity no
Unusually large wellsite no
Damage to improvements no
Conflict with existing land use/values no

Mitigation

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

Comments: short road, site requires 17' +/- cut/fill

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences > 1/4 mile
Possibility of H₂S No
Size of rig/length of drilling time

Mitigation:

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

Comments: no special concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) none
Proximity to recreation sites none in immediate area
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 special concerns in this area

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: no concerns well is on private land

Social/Economic

(possible concerns)
 Substantial effect on tax base
 Create demand for new governmental services
 Population increase or relocation
Comments: no special concerns

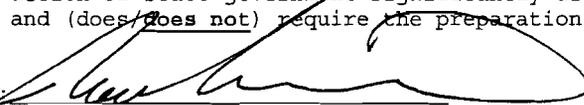
Remarks or Special Concerns for this site

Well is a 10114' (TVD) horizontal Bakken test. Single long lateral 1280 TSU
Docket 135-2003

Summary: Evaluation of Impacts and Cumulative effects

Only minor, short term impacts associated with this project.

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): 
(title:) Administrator
Date: May 6, 2004
Other Persons Contacted:

(Name and Agency)

(subject discussed)

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____