

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

Operator: Burlington Resources Oil & Gas Company LP
Well Name/Number: BR Fee 44-29H 64
Location: SE SE Section 29 T26N R54E
County: Richland, **MT;** **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time: 50-60 days drilling time>

Unusually deep drilling (high horsepower rig): No, triple drilling rig for 13,761' MD/9549'TVD, 15,284'MD/9,549'TVD, 13,816'MD/9,549'TVD, trilateral Bakken Formation horizontal well.

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:

Air quality permit (AQB review)

Gas plants/pipelines available for sour gas

Special equipment/procedures requirements

Other: _____

Comments: No special concerns.

Water Quality

(possible concerns)

Salt/oil based mud: Use freshwater and freshwater mud system on surface hole. Oil based mud down to 7" casing point. Saltwater to drill horizontal legs to TD.

High water table: No

Surface drainage leads to live water: Yes, nearest drainage is unnamed ephemeral tributary drainage to Middle Charlie Creek, about 1/16 of a mile to the west of this location.

Water well contamination: No, all nearby water wells are at least 1/2 mile from this location and the total depth of these wells are 160' or less.

Porous/permeable soils: No, silty sandy clay soils.

Class I stream drainage: None in the area.

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' of surface casing cemented to surface adequate to protect freshwater zones and to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole. Oil based mud will be recycled. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be solidified with flyash, spoil dirt spread to fill pit, top soil spread for final cover over the pit area, and seeded to land owners specification.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None

High erosion potential: No, small cut, up to 7.8' and moderate fill, up to 15.5', required.

Loss of soil productivity : No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: Large, 270'X400' location size required.

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: Access will be off existing county road #143. About 206' of new access road will be built. Oil based drilling fluids will be recycled. Reserve pit liquids to be recycled or hauled to a commercial disposal. Completion fluids will be trucked to a Class II disposal. Reserve pit solids will be solidified with flyash, spoils dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Nearest residences about ½ mile to the south, 1.25 mile to the northeast and 1.5 miles to the east of this wellsite.

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: No concerns. Proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None, identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: None identified.

Threatened or endangered Species: None identified.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)
 Screening/fencing of pits, drillsite
 Other: _____
Comments: Private surface lands. 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: On private lands. No concerns.

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

Well is a 13,761' MD/9549'TVD, 15,284'MD/9,549'TVD, 13,816'MD/9,549'TVD, trilateral Bakken Formation horizontal well.

Summary: Evaluation of Impacts and Cumulative effects

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 10, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells

(subject discussed)

January 10, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____