

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

Operator: Burlington Resources Oil & Gas Company LP

Well Name/Number: BR Fee 41-5H 19

Location: NE NE Section 5 T21N R59E

County: Richland, MT; **Field (or Wildcat) W/C**

Air Quality

(possible concerns)

Long drilling time:: Tri Lateral, 50-60 days drilling time

Unusually deep drilling (high horsepower rig):: No, triple drilling rig for 3 Legged Bakken horizontal well, 15,941'MD/10,121'TVD, 13,659' MD 10,121 TVD, 14,753'MD/10,121'TVD,

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: Gas plant available to take associated gas. No special concerns.

Water Quality

(possible concerns)

Salt/oil based mud: Use freshwater and freshwater mud system on surface and oil based drilling fluids for intermediate string and saltwater for horizontal legs.

High water table: No

Surface drainage leads to live water: Yes, location is close to an irrigation canal, which runs to the southwest and dumps in the Yellowstone River, canal is about 1/16 of a mile to the northwest of this location. Yellowstone River is about 3/4 of a mile to the west of this location.

Water well contamination: No, all water wells nearby are shallower than 50'. Surface casing hole will be drilled with freshwater and freshwater muds. Steel casing will be run to 1700' and cemented to surface.

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

Class I stream drainage: No

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: 1700' of surface casing cemented to surface adequate to protect freshwater zones to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the

top of the solids, spoil dirt to fill pit, top soil spread over 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 4.2' and small fill, up to 0.6', 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: Using existing county road, Highway 350, about 333' of new access road will be built into this location off the existing county road. Drilling fluids will be recycled. Solids will be solidified with fly ash and buried a minimum of 4' below ground level in the lined reserve pit. Pit will be backfilled when dry. Completion fluids will be hauled to a commercial disposal. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None, residence about 3/8 of a mile to the northeast of this wellsite. The town of Sidney, Montana is 6.24 miles to the north of this wellsite.

Possibility of H2S: Slight

Size of rig/length of drilling time: Triple drilling rig 50 to 60 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: Little Missouri National Grasslands, 5.5 miles to the east in North Dakota.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

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 surface 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

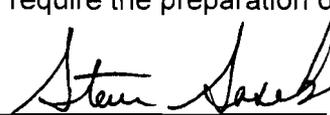
Remarks or Special Concerns for this site

3 Legged Bakken horizontal well, 15,941'MD/10,121'TVD, 13,659' MD 10,121 TVD, 14,753'MD/10,121'TVD.

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: December 4, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

December 4, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____