

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Burlington Resources Oil & Gas Company
Well Name/Number: BR 31-5H 27
Location: NW NE Lot 2 Section 5 T22N R57E
County: Richland, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)

Long drilling time 50-60 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 14,814'
MD/10,300' TVD 2 legged horizontal Bakken formation test.
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) yes, DEQ permit..

Mitigation:

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

Comments: no special concerns two horizontal legs to be drilled from 1 surface location..

Water Quality

(possible concerns)

Salt/oil based mud use freshwater and freshwater mud system on surface and invert , oil based drilling fluid out from under surface casing to intermediate casing depth.
Saltwater to be used out from under intermediate casing to drill horizontal laterals to TD.
High water table no
Surface drainage leads to live water no, location is close to unnamed ephemeral drainage to North Fork Fox Creek and is about 1/2 mile south of this location.
Water well contamination no, all water wells are less than 200' in depth.
Porous/permeable soils no, bentonite 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: 1920' of surface casing cemented to surface adequate to protect freshwater. 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)
Steam crossings none.
High erosion potential no, moderate cut up to 11.3' and small fill up to 7.2', 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 to none
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 over existing state highway (200) and existing two track road. About 3/8 of mile of new access road will be built into this location. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences buildings 1/2 mile to the southwest
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, residences have sufficient distance to mitigate noise problems. 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) 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: on private land

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: no concerns

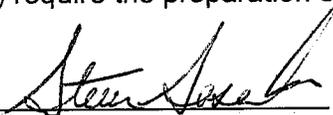
Remarks or Special Concerns for this site

Well is a 14,814'TVD 2 legged horizontal Bakken formation test.

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 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(Name and Agency)

Water wells in Richland County

(subject discussed)

January 20, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____