

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

Operator: Continental Resources, Inc.
Well Name/Number: Rognas 2-22H
Location: NE NE Section 22 T25N R55E
County: Richland, MT; Field (or Wildcat) W/C (Bakken Horizontal)

Air Quality

(possible concerns)

Long drilling time: No, 30 to 40 days drilling time.

Unusually deep drilling (high horsepower rig): No, 19,466'MD/10,096'TVD, a single horizontal lateral in the Bakken formation.

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 – using triple rig to drill to 19,466'MD single lateral horizontal Bakken well.

Water Quality

(possible concerns)

Salt/oil based mud: Yes, freshwater and freshwater mud system on surface hole and oil based mud system on mainhole. Saltwater for horizontal lateral.

High water table: No

Surface drainage leads to live water: No, closest drainage is Timber Coulee ephemeral drainage, about 3/4 of a mile to the southeast of this location. Within this drainage downstream are stock ponds, about 3/4 to 1 mile to the west of this location.

Water well contamination: No, deepest water well nearby is 340' in depth and there are water wells about 5/8 of a mile to the south of this location. Surface hole will be drilled with freshwater and freshwater muds to a depth of 1475'. Surface casing will be cemented to surface from a depth of 1475'.

Porous/permeable soils: No, sandy bentonitic 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: 1475' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No, crossings.
High erosion potential: No, Moderate cut, up to 18.4' and small fill, up to 5.1', 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: No, 500'X260' 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 use existing county roads, #330. New constructed road, about 586' into location. Cuttings will be buried on site in the lined reserve pit. Drilling fluids will be recycled or hauled to a commercial disposal for injection. Pit will be allowed to dry and will be solidified with subsoils and clays before being covered with clean subsoil and topsoil. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is 3 miles to the southwest.
Possibility of H2S: Slight
Size of rig/length of drilling time: Triple drilling rig/short 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.

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: 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: 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. No concerns

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: On private land. No concerns

Remarks or Special Concerns for this site

Well is a 19,466'MD/10,096'TVD, a single horizontal lateral in the Bakken Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term surface 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: November 2, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC
website

(Name and Agency)

Richland County water wells

(subject discussed)

November 2, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____