

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc.
Well Name/Number: Hanrahan 2-24H
Location: NE NW Section 24 T25N R52E
County: Richland, MT; Field (or Wildcat) W/C (Bakken Horizontal)

Air Quality

(possible concerns)

Long drilling time no, 50 to 60 days drilling time.

Unusually deep drilling (high horsepower rig) no, Leg No. 1 14,817'MD Leg No. 2 14,320' MD

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 rule 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 14,817'MD – 2 laterals

Water Quality

(possible concerns)

Salt/oil based mud yes, freshwater and freshwater mud system on surface hole and oil based saltwater mud system on mainhole and saltwater system for horizontal legs.

High water table no

Surface drainage leads to live water no, surface slopes to the north and east to an unnamed ephemeral tributary to West Charly Creek ephemeral drainage 1/4 mile to the north and 1/8 of a mile to the east of this location.

Water well contamination no, all water wells shallower than surface casing setting depth. Surface hole will be drilled with freshwater and freshwater mud. Casing will be set to 1300' and cemented back to surface. Nearest water well is about 3/8 of a mile to the southeast.

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: 1300' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)
 Steam crossings None.
 High erosion potential no, moderate cut, up to 17.8' and small fill, up to 8.1' 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'X270' location size required.
 Damage to improvements no
 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 roads to within 3/8 of a mile of location. Will have to build 1867' of new access into this location. Cuttings will be buried in the lined reserve pit. Reserve pit fluids will either be recycled or hauled to a commercial disposal. No special concerns.

Health Hazards/Noise

(possible concerns)
 Proximity to public facilities/residences buildings about 1 to 1.25 miles to the northeast of this location
 Possibility of H2S slight
 Size of rig/length of drilling time Triple drilling rig/moderate 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

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

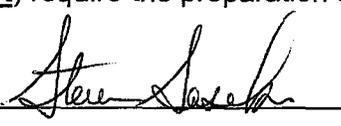
Remarks or Special Concerns for this site

Well is a 14,817' MD 2 legged Bakken horizontal well test in Richland County

Summary: Evaluation of Impacts and Cumulative effects

No significant long term impacts expected, some short term impacts are expected.

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: April 10, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

April 10, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____