

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc.
Well Name/Number: Tiller 1-4H
Location: SW SW Section 4 T25N R55E
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, 16,017' MD and 14,304' 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 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 16,017' MD and 14,304' 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. Saltwater for horizontal sections.

High water table Yes, based upon field inspection 4/6/06.

Surface drainage leads to live water no, location sits in Hay Coulee an ephemeral drainage just east of this location.

Water well contamination no, deepest water well nearby is 392' in depth or less.

Surface hole will be drilled with freshwater and freshwater muds. Surface casing will be cemented to surface from a depth of 1600'.

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: 1600' of surface casing cemented to surface adequate to protect freshwater zones. Remote reserve pit and closed mud system required. Standing water in Hay Coulee drainage based upon field inspection 4/6/06.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no, crossing.

High erosion potential no, small cut, up to 5.1' and small fill, up to 0.7', 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: Access will use existing county roads and existing well access roads. Well access road will be used for part of the way into location. About 618' of new constructed road will be built into location. Drill cuttings will be disposed of in the lined reserve pit. Drilling fluids will be trucked to a commercial Class II disposal. Pit will be backfilled after remaining fluids have evaporated. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby

Possibility of H2S slight

Size of rig/length of drilling time Triple drilling rig/short 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

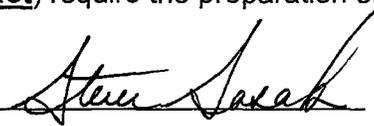
Remarks or Special Concerns for this site

Well is a 9,782'TVD, 16,017' and 9,782' TVD, 14,304' MD, 2 legged 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: April 7, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells
(subject discussed)
April 2, 2006
(date)

If location was inspected before permit approval:

Inspection date: 4/6/06

Inspector: Bob Schmidt

Others present during inspection: Dirt Contractor