

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

Operator: Continental Resources, Inc.
Well Name/Number: Constance 3-7H
Location: NW NW Section 7 T23N R56E
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, single lateral Bakken Formation horizontal well, 19,689' MD 10,350' 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: No special concerns – using triple rig to drill to 19,689' MD – 1 horizontal lateral.

Water Quality

(possible concerns)

Salt/oil based mud: Yes, freshwater and freshwater mud system on surface hole and oil based mud system on mainhole. Horizontal lateral will be drilled with brine water.

High water table: No

Surface drainage leads to live water: No, surface slopes to the south towards an unnamed ephemeral tributary drainage to Three Buttes Creek, about ¼ mile to the south from this location.

Water well contamination: No, all water wells shallower than surface casing setting depth of 1880'. Surface hole will be drilled with freshwater and freshwater drilling mud. Surface casing will be set at 1880' and cemented to surface, below the base of the Fox Hill Formation and to protect shallow surface waters.

Porous/permeable soils: No, sandy clay 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: 1880' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.

High erosion potential: No, moderate cut, up to 13.7' and moderate fill, up to 13.0', 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: Slight, surface use appears to be a cultivated field.

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: Surface access will be over existing county road, #330. About 854' of new road will be constructed to enter this location. Oil based drilling fluids will be recycled. Completion fluids will be trucked to a Class II disposal. Drill cuttings and solids will be buried in the reserve pit, after fluids have been removed. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Buildings 1 ¾ of a mile to the northeast and 2 miles to the east of this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Triple drilling rig/moderate 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: Proper BOP stack should mitigate any 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: 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

Well is a 19,689' MD/10,350'TVD Bakken Formation single lateral horizontal well test in Richland County

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drill of this well, but some short term impacts will occur, but should be mitigated in a short time.

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 14, 2008



Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

January 14, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____