DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

BOARD OF OIL AND GAS CONSERVATION

BRIAN SCHWEITZER, GOVERNOR

OIL AND GAS CONSERVATION DIVISION

STATE OF MONTANA

December 31, 2007

RECEIVED

JAN 0 3 2008

LEGISLATIVE ENVIRONMENTAL POLICY OFFICE

Mr. Todd Everts
Environmental Quality Council
Room 106, State Capitol
Helena, MT 59620

Re: Environmental Assessment Reports

Dear Todd:

Enclosed please find a copy of the environmental assessments completed by this office covering the period from October 1 through December 31, 2007 with regard to applications for permits to drill oil or gas wells on state and privately owned lands in the State of Montana.

Let us know if you require any further information.

Sincerely,

Thomas P. Richmond
Administrator

km

Encs. 150

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1625 ELEVENTH AVENUE
PO BOX 201601
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(406) 444-6675

TECHNICAL AND
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(406) 656-0040

NORTHERN FIELD OFFICE
201 MAIN STREET
PO BOX 690
SHELBY, MONTANA 59474-0690
(406) 434-2422

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc.
Well Name/Number: Rachel 1-12H
Location: NW NW Section 12 T24N R56E
County: Richland , **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time: No, 50-60 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken trilateral horizontal No. 1 TVD 10,424'/MD 16,347', No.2 TVD 10,424'/MD15,180', No.3 10,223'/MD 14,845'.
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:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud: Yes to long string oil based drilling fluids. Horizontal section to be drilled with brine water. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table: No
Surface drainage leads to live water: No, closest drainages are North Fork Lone Tree Creek an ephemeral drainage, about 5/8 of a mile to the southwest and Hardscrabble Creek, an ephemeral drainage, about 1/2 of a mile to the northeast of this location.
Water well contamination: No, all water wells close by are shallower than 1500'. Closest water well is about 5/8 of a mile to the southeast from this location.
Porous/permeable soils: No, silty sandy bentonitic soils.
Class I stream drainage: No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1500' surface casing not sufficient. Recommend setting 1816' of surface casing, this should be well below any freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: None

High erosion potential: No, location has a moderate cut of up to 11.4' and a small fill of up to 2.1', required.
Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, large well site 500'X270'
Damage to improvements: Slight, surface use appears to be a cultivated field.
Conflict with existing land use/values: Slight, surface use appears to be a cultivated field.

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing highways and county road, #201. About 3435' of new road access will be built. Cutting will be buried in the lined reserve pit. Oil based drilling fluids will be recycled. Completion pit fluids will either be recycled or hauled to a commercial Class II disposal. Lined reserve pit will be closed after allowing pit to dry. No concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is 5/8 of a mile to the northeast of this location.
Possibility of H2S: Slight
Size of rig/length of drilling time: Triple drilling rig 50 to 60 days drilling time.

Mitigation:
X Proper BOP equipment
__ Topographic sound barriers
X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

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: None identified.
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: 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

Summary: Evaluation of Impacts and Cumulative effects

Bakken trilateral horizontal well: No. 1 TVD 10,424'/MD 16,347', No.2 TVD 10,424'/MD15,180', No.3 10,223'/MD 14,845'

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: October 9, 2007

Other Persons Contacted:

(Name and Agency)
Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells
(subject discussed)
October 9, 2007
(date)

If location was inspected before permit approval:
Inspection date:
Inspector:
Others present during inspection: