Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc.
Well Name/Number: Slocum 1-8H
Location: NW NE Section 8T26N R53E
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 triple derrick drilling rig to drill to 18,933'MD/8,899'TVD a single lateral horizontal Bakken Formation well.
In/near Class I air quality area: No Class I air quality area.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
- X 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 18,933'MD/8,899'TVD a single lateral horizontal Bakken Formation well.

Water Quality

(possible concerns)
Salt/oil based mud: Yes, oil based invert drilling fluid system on the mainhole and saltwater for the horizontal lateral. Freshwater and freshwater mud system on surface hole,
High water table: No high water table anticipated at this surface location.
Surface drainage leads to live water: No, closest drainages are unnamed ephemeral tributary drainages to West Charlie Creek, about 1/8 of a mile to the east and southeast, about ¼ of a mile to the south and about 1/4 of a mile to the north from this location.
Water well contamination: No, nearest water wells are about ½ of a mile to the east southeast and northeast, about 7/8 of a mile to the east northeast and about 7/8 of a mile to the southeast from this location. Depth of these water wells are 450' and less. Surface hole must be drilled with freshwater and freshwater mud. Surface casing will be set at 1264' and cemented to surface.
Porous/permeable soils: No, silty sandy clay soils.
Class I stream drainage: No Class I stream drainages in the area of review.

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: 1264' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No stream crossings anticipated, only crossing ephemeral drainages.
High erosion potential: No, small cut, up to 9.6' and small fill, up to 7.0', 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, large wellsite, 500'X270' location size required.
Damage to improvements: Slight, surface use cultivated land.
Conflict with existing land use/values: Slight

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: Will use existing county road, #315. About 1828' of new access road will be built into this location, from an adjacent well location. Drill cutting will be disposed of in the lined reserve pit. Invert drilling fluids will be recycled. Reserve pit fluids will be recycled and/or haul to a commercial disposal. Lined reserve pit will be backfilled when dry. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residences are about 7/8 of a mile to the southeast, about 7/8 of a mile to the northeast and about 1.125 miles to the souhwest from this location.
Possibility of H2S: Slight chance of H2S.
Size of rig/length of drilling time: Triple drilling rig/short 30 to 40 days drilling time.

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

Comments: Adequate surface casing and operational BOP should mitigate any problems. 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: Species identified as threatened by the USFWS are Pallid Sturgeon, Interior Lease Tern, Piping Plover and Whooping Crane. Species listed as candidate species are the Greater Sage Grouse and Sprague's Pipit. NH tracker website for this Township and Range lists zero (0) species of concern.

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____
Comments: Private cultivated surface lands. There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

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 cultivated surface lands. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

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 18,933'MD/8,899'TVD a single lateral horizontal Bakken Formation well.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected, some short term 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): /s/Steven Sasaki _____

(title:) Chief Field Inspector
Date: October 16, 2011

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
October 16, 2011
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Richland County
(subject discussed)

October 16, 2011
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T26N R53E
(subject discussed)

October 16, 2011
(date)

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