

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

Operator: McMinn Operating Company Inc.
Well Name/Number: Ryan Ranch, LLC
Location: SE SE Section 30 T30N R6W
County: Pondera MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig to drill to 2800' TD.
Possible H₂S gas production: No
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 small rig to drill to 2800' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.
High water table: No
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Birch Creek, about ¼ of a mile to the south from this location.
Water well contamination: No, all water wells within 1 mile are shallower than 550'.
Surface hole will be drilled with freshwater and/or air. Steel surface casing will be set and cemented to surface from 550'.
Porous/permeable soils: No, sandy bentonitic 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: 550' of surface casing will be set and cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems or air to be used.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.
High erosion potential: No, small cut, up to 0.7' and small fill, up to 0.3', 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, 200'X200' location size required.

Damage to improvements: No, surface use is a grassland.

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 be over existing state highway, #44, existing county road, Gaylord Road and existing farm road. A short access road of about 1/4 of a mile will be built into this location. Pits will be unlined. Drilling fluids and cuttings will be allowed to dry in the earthen pits. Pits will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Closest residence buildings 1/2 of a mile to the northeast and about 1 mile to the southwest of this location.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 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): None identified.

Proximity to recreation sites Lake Frances about 6 miles to the southeast.

Creation of new access to wildlife habitat: None

Conflict with game range/refuge management: None

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, private surface

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.

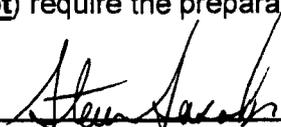
Remarks or Special Concerns for this site

Well is a 2800' Bow Island Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No, significant impacts expected, some short term impacts are expected, but should be able to mitigate these short term impacts.

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: May 16, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Pondera County water wells

(subject discussed)

May 16, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____