

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

Operator: Headington Oil, Limited Partnership.  
Well Name/Number: BR Schmitz 41X-35  
Location: NE NE Section 35 T26N R53E  
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  
Possible H2S gas production slight  
In/near Class I air quality area No  
Air quality permit for flaring/venting (if productive) Yes, if productive. DEQ air quality permit required.

Mitigation:

- Air quality permit (AQB review)
- Gas plants/pipelines available for sour gas
- Special equipment/procedures requirements
- Other: \_\_\_\_\_

Comments: Existing gas pipelines in the area.

---

**Water Quality**

(possible concerns)

Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal legs 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  
Water well contamination No, all nearby water wells are less than 100' in depth. Surface casing will be drilled with freshwater to 1200' and surface casing run and cemented to surface.  
Porous/permeable soils No, gumbo soils  
Class I stream drainage No, Class I stream drainages.

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: 1200' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings None  
High erosion potential No, location will need a small cut of up to 5.9' and a moderate fill of up to 10.7', required.  
Loss of soil productivity None, location to be restored after drilling well, if productive. In nonproductive

unused portion of drillsite will be reclaimed.

Unusually large wellsite No, large well site 430'X300'

Damage to improvements Slight

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 county roads. A short access will be constructed from the county road into this location. Approximately, 1/8 of a mile of new access will be built.

---

---

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

### 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: Private surface

**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**

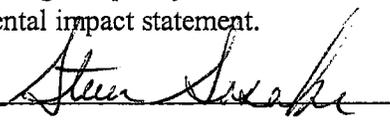
This is a three legged Bakken horizontal well 15,278' MD , 13,861' MD, 13,763' MD

**Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected. Some short term impacts will occur, but are will be mitigated in 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: February 2, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(subject discussed)

Water wells in Richland County

(date)

February 2, 2006

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_