

Montana Board of Oil and Gas Conservation  
Environmental Assessment

Operator: Headington Oil, LP  
Well Name/Number: Redwater State 24x-16  
Location: SE SW 16 T24N R55E  
County: Richland, MT; Field (or Wildcat) wildcat

Air Quality

(possible concerns)

Long drilling time no  
Unusually deep drilling (high horsepower rig) no  
Possible H2S gas production No  
In/near Class I air quality area no  
Air quality permit for flaring/venting (if productive) no

Mitigation:

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

Comments: No special concerns

Water Quality

(possible concerns)

Salt/oil-based mud Yes  
High water table no  
Surface drainage leads to live water no  
Water well contamination no  
Porous/permeable soils no  
Class I stream drainage no

Mitigation:

xx Lined reserve pit  
xx Adequate surface casing  
   Berms/dykes, re-routed drainage  
   Closed mud system  
   Off-site disposal of solids/liquids (in approved facility)  
   Other: \_\_\_\_\_

Comments: will use oil base mud, surface casing is adequate. Oil mud recycled. Oil drilled cuttings stored in lined pit.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no  
High erosion potential no  
Loss of soil productivity no  
Unusually large wellsite no  
Damage to improvements no  
Conflict with existing land use/values no

Mitigation

   Avoid improvements (topographic tolerance)  
   Exception location requested  
xx Stockpile topsoil  
   Stream Crossing Permit (other agency review)  
xx Reclaim unused part of wellsite if productive  
   Special construction methods to enhance reclamation  
   Other: \_\_\_\_\_

Comments: No special concerns for this site. Location is requires about 11' cut/fill.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences > 1/4 mile  
Possibility of H2S No  
Size of rig/length of drilling time

Mitigation:

xx Proper BOP equipment  
   Topographic sound barriers  
   H2S contingency and/or evacuation plan

Special equipment/procedures requirements  
 Other: \_\_\_\_\_  
Comments: no special concerns

**Wildlife/recreation**

(possible concerns)  
Proximity to sensitive wildlife areas (DFWP identified) 10 miles  
Proximity to recreation sites none in immediate area  
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 special concerns in this area

**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: state lands

**Social/Economic**

(possible concerns)  
 Substantial effect on tax base  
 Create demand for new governmental services  
 Population increase or relocation  
Comments: no special concerns

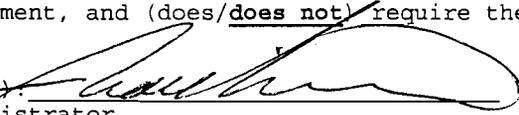
**Remarks or Special Concerns for this site**

Well is a 15,091(MD) Bakken test -two horizontal laterals to N and S of surface location.

Summary: Evaluation of Impacts and Cumulative effects

Only minor, short term impacts associated with this project.

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 (BOG):   
(title:) Administrator  
Date: October 16, 2003  
Other Persons Contacted:

\_\_\_\_\_  
(Name and Agency)

\_\_\_\_\_  
(subject discussed)

\_\_\_\_\_  
(date)

If location was inspected before permit approval:

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

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

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