

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Headington Oil, LP
Well Name/Number: 4-J Ranch 44X-27
Location: SE SE 27 T24N R57E
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 (AQB 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 closed mud system for 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 requires about 11' cut/fill required.

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) no
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: private 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 dual lateral Horizontal Bakken test; TSU is E ¼ and SW ¼ - a 480 acre statewide horizontal TSU

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 (BOGC): [Signature]
(title:) Administrator
Date: December 23, 2003
Other Persons Contacted:

(Name and Agency)

(subject discussed)

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____