

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

Operator: Headinton Oil, Limited Partnership.
Well Name/Number: Fee 41X-26
Location: NE NE Section 26. T26N R52E
County: Richland, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time No, 60-70 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: _____

Water Quality

(possible concerns)

Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal legs will be drilled with saltwater. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary drainage to West Charlie Creek which lies 3/4 of a mile south of this location.
Water well contamination No, all water wells within 1 mile are less than 1000' in depth. Surface hole will be drilled with freshwater and steel surface casing set and cemented from 1000' 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/dikes, re-routed drainage
 Closed mud system
 Off-site disposal of solids/liquids (in approved facility)
 Other: _____

Comments: 1000' 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, moderate cut, up to 22.0' and moderate fill, up to 15.9', required.
Loss of soil productivity None, location to be restored after drilling well, if well is nonproductive. If

productive, 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 along existing county road, CR 313 and CR 143. A short access from county road CR 313 into location will be built, about 300'. Cuttings will be disposed of in the lined reserve pit. Drilling pit fluids will either be recycled to the next location or hauled to a commercial disposal. Pit will be allowed to dry and then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby, closest residences are 0.8 of a mile to the south..

Possibility of H2S Slight

Size of rig/length of drilling time Triple drilling rig 60 to 70 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

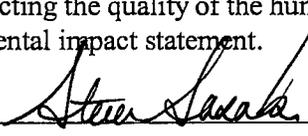
Remarks or Special Concerns for this site

This is a 3 legged Bakken horizontal well test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts 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): Steven Sasaki 

(title:) Chief Field Inspector

Date: March 28, 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)

March 28, 2006

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____