

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

Operator: Headington Oil, Limited Partnership.
Well Name/Number: Steinbeisser 11X-18
Location: NW NW Section 18 T22N R59E
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. Contact DEQ Air Quality for permit.

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. Surface casing hole to be drilled with freshwater and freshwater mud. Horizontal holes will be drilled with brine water.
High water table Yes, in farmed field.
Surface drainage leads to live water Yes, Yellowstone river is 1.5 miles to the east of this location.
Water well contamination No, most nearby wells less than 100' in depth. Deepest well in the section 18 is 1286' deep. This well will have surface casing hole drilled with freshwater and casing run to 1550' and cemented to back 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: 1550' 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 relatively flat, small cut, up to 2' and small fill, up to 0.8'.

required.

Loss of soil productivity None, location to be restored after drilling well if nonproductive. If productive unused portion of dirllsite will be reclaimed.

Unusually large wellsite No, large well site 530'X300'

Damage to improvements No, location to be restored after drilling if nonproductive. . If productive unused portion of dirllsite will be reclaimed.

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 _____

. If productive unused portion of dirllsite will be reclaimed.

Comments: Access will be over existing State paved highway #16 and existing county gravel road. About 33' of new access road will be built off the county road into this location. Require offsite disposal pit, wellsite is in irrigated field. No concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences residence 1/4 mile to the east and 1/2 mile to the north. Town of Newton Junction is to the south 1 mile and town of Sidney is 3 miles to the northeast of this location. Cemetery is 7/8 of a mile to the east of this location.

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. Noise should not be a problem if rig is adequately muffled and sufficient distance from residence to rig should mitigate this.

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 oil production has existed around Sidney since the 50's.

Remarks or Special Concerns for this site

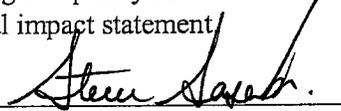
Two legged Bakken horizontal well. Oil production exists in the surrounding section. Remote location in section 18 T22N R59E drilling two legs into sections 1 and 12 T22N R58E. Location is an extension of and existing well pad for the Haffner 11X-18 and O'Brien Brothers 11X-18.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

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 7, 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 7, 2006

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____