

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

Operator: Devon Energy Production Company, L.P.
Well Name/Number: Johnson No. 26-16
Location: SE SE Section 26 T32N R14E
County: Hill, MT; **Field (or Wildcat)** Bullhook Unit, Tiger Ridge Field

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
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: no special concerns – using small rig to drill to 2500'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water Yes, closest live water is Big Sandy Creek, about 1/4 of a mile to the northwest of this location.
Water well contamination no, closest water well is 141' deep about 5/8 of a mile to the south of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

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: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production longstring will be cemented back to the surface casing.

Soils/Vegetation/Land Use

(possible concerns)
Stream crossings none
High erosion potential no, small cut, up to 1' and small fill, up to 1', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 250'X250' location size required.

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 highways and county roads. About 1200' of access road will be built into this location off the county road. Cuttings will be buried in the earthen pits. Drilling fluids will be offsite disposed of in a stock pond as sealant. Drilling pits will be allowed to dry and then backfilled. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences about 1/2 mile to the south of this location.

Possibility of H2S none

Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.

Proximity to recreation sites City of Havre Herron Park 4.5 miles to the northeast within the city limits of Havre, MT, Agricultural Experiment Station and Fort Assiniboine about 3 miles to the east of this location.

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 Fort Assiniboine site 3 miles to the east.

Mitigation

avoidance (topographic tolerance, location exception)

other agency review (SHPO, DSL, federal agencies)

Other: _____

Comments: location on private land

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Well is a development well in an existing gas field, Tiger Ridge. No concerns

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can 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: March 17, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website.

(Name and Agency)

Hill County water wells.

(subject discussed)

March 17, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____