

Montana Board of Oil and Gas Conservation  
Environmental Assessment

Operator: Fidelity Exploration and Production Company  
Well Name/Number: Fee No. 1340  
Location: NE SE Section 34 T32N R33E  
County: Phillips, MT; Field (or Wildcat) Bowdoin Dome

**Air Quality**

(possible concerns)  
Long drilling time no, 3 to 4 days drilling time.  
Unusually deep drilling (high horsepower rig) no, 1800' TD  
Possible H2S gas production no  
n/near Class I air quality area no  
Air quality permit for flaring/venting (if productive) n/a

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 1800'

**Water Quality**

(possible concerns)  
Salt/oil based mud no, freshwater and freshwater mud system.  
High water table no  
Surface drainage leads to live water no surface drainage does not lead to live water, but the closest live water is the Beaver Creek about 1/4 of a mile to the north of this location.  
Water well contamination no, all water wells nearby shallower than 120'  
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 casing will be cemented to surface.

**Soils/Vegetation/Land Use**

(possible concerns)  
Stream crossings none.  
High erosion potential no, small cut, up to 1.1' and no fill 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, 120'X190' 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 county roads and existing well access roads. A short access road will be built into this location. No special concerns

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### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences 3/4 of a mile to the north and 1 mile to the southeast 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..

Proximity to recreation sites Nelson State recreational area, Sleeping Buffalo resort, and Nelson Reservoir about 5 miles to the west 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 distance is far enough away and won't create a disturbance.

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**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: No concerns private land.

**Social/Economic**

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Well is an additional well to the unit in an existing gas field.

No concerns

**Remarks or Special Concerns for this site**

Well is a 1800' Belle Fourche Formation test.

**Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected. Some short term impacts will occur, but will be mitigated in time. Well is a development well in an existing gas field.

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: January 12, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)  
Water wells in Phillips County

(subject discussed)  
January 12, 2006

(date)

If location was inspected before permit approval:

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

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

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