

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

**Operator:** Fidelity Exploration and Production Company  
**Well Name/Number:** Fee No. 1341  
**Location:** NW SE Section 7 T32N R34E  
**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  
In/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: Gas gathering lines and compressors exist within the Bowdoin Gas Field.

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 Milk River about 3/4 mile to the south of this location.  
Water well contamination no, all water wells nearby shallower than 100'. Closest water wells are within 1/8 of a mile of the drillsite across the county road, but are less than 70' in depth and should not be a problem. This well will have surface hole drilled with freshwater and freshwater muds to 150'. Surface casing will be cemented from 150' to surface. If productive production casing will be cemented to surface.  
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)  
Steam crossings no stream crossings planned.  
High erosion potential no, small cut, up to 4' and small fill, up to 0.1', 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, 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 country roads and well trails. About 100' of new access will be built into this location. Drilling fluids will be hauled to a nearby stock pond or allowed to dry in the pits. Cuttings will be buried in the unlined drilling pits. Drilling pits will be allowed to dry and then backfilled. No special concerns

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### Health Hazards/Noise

(possible concerns)  
Proximity to public facilities/residences Residences about 3/8 to 1/2 mile to the south and southwest.  
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: Noise should not be a problem at this distance.  
Comments: no concerns

### 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: on private land

**Social/Economic**

(possible concerns)  
 Substantial effect on tax base  
 Create demand for new governmental services  
 Population increase or relocation  
Comments: no concerns

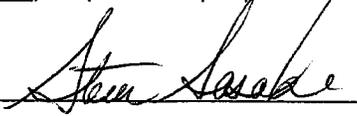
**Remarks or Special Concerns for this site**

Well is a 1800' Mowry Formation test.

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

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short 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 1, 2006

Other Persons Contacted:  
\_\_\_\_\_

Montana Bureau of Mines and Geology, Groundwater Information Center

\_\_\_\_\_  
(Name and Agency)

Water wells in Phillips County

\_\_\_\_\_  
(subject discussed)

March 1, 2006

\_\_\_\_\_  
(date)

If location was inspected before permit approval:

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

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

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