

Montana Board of Oil and Gas Conservation  
Environmental Assessment

Operator: Fidelity Exploration and Production Company  
Well Name/Number: Fee No. 1330  
Location: Lot 8 Section 17 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  
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 yes  
Surface drainage leads to live water No, surface drainage could lead to live water.  
Closest live water is the Milk River about 1/8 of a mile to the west and Nelson Reservoir 2.25 miles to the west of this location.  
Water well contamination no, all water wells nearby shallower than 120' in depth.  
Surface hole will be drilled to 150' with freshwater and freshwater muds. Steel surface casing will be set and cemented to surface. If productive production casing will be set and cemented back 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)

Stream crossings none.

High erosion potential no, small cut, up to 1.5' and small fill, up to 2.3', 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 no

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. Cuttings and mud solids will be buried in the unlined drilling pits. Fluids will either be hauled to a nearby stock pond or allowed to dry in the unlined pits. Pits will be backfilled after being allowed to dry. No special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None, closest buildings 1/4 mile to the north and 3/8 of a mile to the west 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, noise should not be a problem.

### Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) Hewitt Lake National Wildlife Refuge about 5 miles to the west of this location.

Proximity to recreation sites Cole Ponds State Fishing area about 1/2 mile to the north and Nelson Reservoir about 2.25 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 sufficient to not create a disturbance when drilling this well.

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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.

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### Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Well is in an existing gas field, Bowdoin Gas Field. Well is an additional well to the spacing unit. No concerns

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### Remarks or Special Concerns for this site

Well is a 1800' Mowry Formation test. Well is a development well within an existing gas field.

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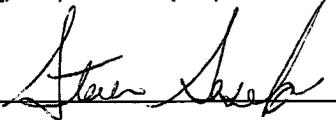
### Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but will mitigate in time.

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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

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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: \_\_\_\_\_