

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

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1322
Location: NE SW Section 7 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 Milk River about 1/2 mile to the southwest and Nelson Reservoir 1.5 miles to the southwest of this location.
Water well contamination no, all water wells nearby shallower than 100'
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 5.9' 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 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 road with a short access built into this location. Cuttings will be buried in the earthen reserve pit. Fluids will be either trucked to a private stock reservoir or allowed to evaporate in the earthen reserve pit. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None, closest buildings 1/2 mile to the southeast and 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 4 miles to the west of this location.

Proximity to recreation sites Cole Ponds State Fishing area about 1 mile to the southeast and Nelson Reservoir about 1 mile to the southwest 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.

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 in an existing gas field. Well is an additional well to the spacing unit. No concerns

Remarks or Special Concerns for this site

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

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but will mitigate 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: 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: _____