

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1319
Location: NE NW Section 34 T33N R32E
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 Possible, location is in glaciated prairie pothole area.
Surface drainage leads to live water no surface drainage does not lead to live water, but the closest drainage is Whitewater Creek about 1.5 miles to the east 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 1.8' and small fill, up to 0.8', 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 well access roads. A short access will be built off of these existing roads into this location. Cuttings will be buried in the earthen reserve pit. Fluids will either be trucked to a nearby private stock reservoir or allowed to dry in the reserve pit. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby

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 Hewitt National Wildlife Refuge boundary about 4.5 miles to the southwest of this location.

Proximity to recreation sites Nelson Reservoir about 3 miles to the south and Cole Ponds State Fishing Area about 3 miles to the southeast 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.

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: no concerns

Remarks or Special Concerns for this site

Well is a 1800' Belle Fourche Formation test.

Summary: Evaluation of Impacts and Cumulative effects

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: _____