

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

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1337
Location: NE NW Section 33 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 no
Surface drainage leads to live water yes, surface drainage does lead to live water, closest live water is Beaver Creek just off location, estimated within 100' to the northwest corner of this location.
Water well contamination no, all water wells nearby shallower than 90' nearby. Surface hole will drilled with freshwater and freshwater muds. Steel surface casing will be set to 150' and cemented to surface. Production casing if set 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. Location will be diked to prevent runoff from entering Beaver Creek.

Soils/Vegetation/Land Use

(possible concerns)
 Steam crossings none.
 High erosion potential no, small cut, up to 2.5' 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. 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 Residence 1/2 of a mile to the southwest and 1.25 miles to the east 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: Noise should not be a problem at these distances.
 Comments: no concerns

Wildlife/recreation

(possible concerns)
 Proximity to sensitive wildlife areas (DFWP identified) n/a..None identified
 Proximity to recreation sites Nelson State recreational area, Sleeping Buffalo resort, and Nelson Reservoir about 4.0 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.

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, Bowdoin Field. No concerns

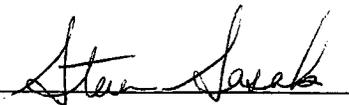
Remarks or Special Concerns for this site

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 will be mitigated in time. Well is a development well in an existing gas field, Bowdoin 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: 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: _____