

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

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1338
Location: NW NE 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 no surface drainage does not lead to live water, but the closest live water is the Beaver Creek about 1/8 a mile to the north 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.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings none.
High erosion potential no, small cut, up to 1.0' 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. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Residence $\frac{3}{4}$ of a mile to the southwest and 1 mile 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 4.5 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.

No concerns

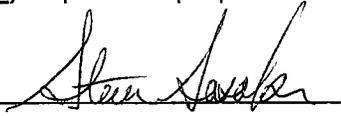
Remarks or Special Concerns for this site

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: _____