

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

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1430
Location: SE NE Section 14 T32N R34E
County: Phillips, MT; **Field (or Wildcat)** Bowdoin Dome

Air Quality

(possible concerns)

Long drilling time: No, 2 to 3 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): Yes, DEQ air quality permit required under 75-2-211.

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'TD.

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, closest live water is Frenchman Creek about 3/8 of a mile to the east from this location. The Milk River about 1.5 miles to the south of this location.
Water well contamination: No, closest water wells are about 5/8 of a mile to the southeast and 3/4 of a mile to the southeast and 3/4 of a mile to the south and is a domestic water well. All water wells are shallower than 100'. Surface casing will be drilled with freshwater and surface casing set and cemented from 150' to surface. This should protect all surface water from contamination. Production casing if set will be cemented back to surface also.
Porous/permeable soils: No, sandy 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: No stream crossings.

High erosion potential: No, small cut, up to 7.7' and small fill, up to 5.3', 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: 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 country roads and well access road. About 1/32 of a mile of new access will be built into this location off an existing well access road. Drilling fluids will be hauled to a nearby stock pond. Cuttings will be buried in the unlined drilling pits. Drilling pits will be allowed to dry and then backfilled. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest building are 3/8 of a mile to the east and 3/4 of a mile to the south of this location.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 2 to 3 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): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: None identified.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____
Comments: Private surface lands. No concerns

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: On private surface lands. No concerns.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns. Development well within an existing gas field,

Bowdoin Gas Field.

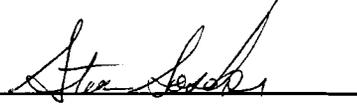
Remarks or Special Concerns for this site

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 can be mitigated in a short 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: June 30, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Phillips County

(subject discussed)

June 30, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____