Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: State No. 1329
Location: SE SW Section 16 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
_X_ 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 yes
Surface drainage leads to live water No, surface drainage could lead to live water. Closest live water is the Milk River about 1/2 of a mile to the west and north of this location. Nelson Reservoir about 3.5 miles to the west.
Water well contamination no, all water wells nearby shallower than 120' in depth. Surface hole will be drilled to 150' with freshwater and freshwater muds. Steel surface casing will be set and cemented to surface. If productive production casing will be set and cemented back to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
_X_ 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 1.1' and small fill, up to 0.5', 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
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ 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 None, closest buildings 1mile to the northwest and 1mile to the southwest 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:
_X_ 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 6 miles to the west of this location.
Proximity to recreation sites Cole Ponds State Fishing area about 3/4 mile to the northwest and Nelson Reservoir about 3.25 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)
_X_ Other agency review (DFWP, federal agencies, DSL)

__ Screening/fencing of pits, drillsite
__ Other:
Comments: no concerns, State of Montana Trust Lands will do surface EA.

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
_X_ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: No concerns, State of Montana Trust Lands will do surface EA.

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, Bowdoin Gas Field. Well is an additional well to the spacing unit. No concerns

Remarks or Special Concerns for this site

Well is a 1800' Mowry 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: March 2, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Phillips County

(subject discussed)

March 2, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____