Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee No. 1507
Location: SW Lot 10 Section 19 T32N R35E
County: Valley **, 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, small single derrick drilling rig to drill to 1800' TD.
Possible H2S gas production: None anticipated.
In/near Class I air quality area: No Class I air quality area.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
_X_ Air quality permit (AQB review)
___ Gas plants/pipelines available for sour gas
___ Special equipment/procedures requirements
_X_ Other: Existing gas gathering pipelines in the area.
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 high water table anticipated.
Surface drainage leads to live water: No, closest live water is the Milk River, about ¼ of a mile to northeast from this location.
Water well contamination: None, closest water well is about 1/2 of a mile to the east from this location. Depth of this water well is 50'. Surface hole will be drilled with freshwater and steel casing cemented back to surface from 150' to protect groundwaters. Production casing if set will be cemented back to surface to protect groundwaters.
Porous/permeable soils: Yes, sandy silty 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: Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: No, stream crossings anticipated.
High erosion potential: No, small cut, up to 3.4' and small fill, up to 2.1', 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, surface use appears to be grassland adjacent to county road.
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: Using existing county roads, Bjornberg Bridge Road. A short access road off the Bjornberg Bridge Road will be built into this location. Cuttings will be buried in the earthen reserve pit. Drilling fluids will be hauled to a nearby stock pond for disposal with surface owner approval or allowed to dry in the pits. Drilling pits will be allowed to dry before being backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residences are about ¾ of a mile to the southeast and 3/4 of a mile to the west northwest from this location.
Possibility of H2S: None anticipated.
Size of rig/length of drilling time: Small drilling rig/short 2 to 3 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, distance is sufficient to not create a problem with noise.

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: Listed threatened or endangered species for Valley County are Pallid Sturgeon, Piping Plover, Black Footed Ferret, Interior Least Tern and Whooping Crane. Candidate species is the Greater Sage Grouse. .

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)

__ Screening/fencing of pits, drillsite
__ Other: _____
Comments: Private surface lands adjacent to county gravel road and cultivated fields. 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: 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. Well is a development well within the Bowdoin Dome Gas Field.

Remarks or Special Concerns for this site

Well is a 1800' Mowery Formation development well.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Only some short term impacts will occur.

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): /s/Steven Sasaki
(title:) Chief Field Inspector
Date: June 26, 2010

Other Persons Contacted:

_____
Montana Bureau of Mines and Geology, Groundwater Information Center
_____
(Name and Agency)
Water wells in Valley County
_____
(subject discussed)
June 26, 2010
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Valley County
(subject discussed)

June 26, 2010
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____