Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Petro Hunt, LLC
Well Name/Number: Dotson 6B-2-1H
Location: NW NW Section 6 T22N R57E
County: Richland, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time: 30-40 days drilling time for a dual lateral horizontal Bakken Formation test.
Unusually deep drilling (high horsepower rig): No, large triple drilling rig for 15,750' MD/10,275'TVD dual lateral horizontal Bakken Formation Test.
Possible H2S gas production: Slight
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:

Comments: No special concerns, adequate surface casing, 2000' to be set and cemented back to surface with proper BOP stack should mitigate any concerns. Triple rig to drill to 15,750' MD/10,275'TVD.

Water Quality

(possible concerns)
Salt/oil based mud: Use freshwater and freshwater mud system on surface hole. Invert oil based mud for intermediate hole and horizontal laterals.
High water table: No
Surface drainage leads to live water: No, North Fork Fox Creek ephemeral drainage about 1/8 of a mile to the north of this location. Unnamed ephemeral drainage to North Fork Fox Creek , about 1/8 of a mile to the south of this location. Should not be any discharge of fluids off this location.
Water well contamination: No, all water wells nearby are less than 300' in depth.
Porous/permeable soils: No, sandy clay soils.
Class I stream drainage: No

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
X Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 2000' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used on surface hole

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: None.
High erosion potential: No, moderate cut, up to 14.5' and small fill, up to 605', 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: Large, 440'X350' location size required.
Damage to improvements: Slight, surface use is grassland.
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: No special concerns

_____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Residences within about 7/8 of a mile to the east of wellsite.
Possibility of H2S: Slight
Size of rig/length of drilling time: Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: No concerns. Proper BOP stack and surface casing should be able to control any problems that occur.

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: 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.

Remarks or Special Concerns for this site

Well is a 15,750' MD/10,275'TVD dual lateral horizontal Bakken Formation Test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected. 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): Steven Sasaki

(title:) Chief Field Inspector

Date: April 9, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

April 9, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____