Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Petro Hunt, LLC
Well Name/Number: Dotson 6A-1-1H
Location: NE NE 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 14,453' MD/10,265'TVD and 14,191'MD/10,270'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 14,453' MD/10,265'TVD and 14,191'MD/10,270'TVD dual lateral horizontal Bakken Formation Test.

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 1/4 of a mile to the south of this location. There should not be any discharge of fluids off this location.
Water well contamination: No, all water wells nearby are less than 100' in depth. Closest water well is about 1/8 of a mile to the southeast of this location. Surface hole will be drilled with freshwater and steel surface casing set and cemented from 2000' to protect surface waters and the Fox Hill aquifer.
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 11.5' and small fill, up to 7.0', 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.
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: Residence is about 1/8 of a mile to the southeast 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 14,453' MD/10,265'TVD and 14,191'MD/10,270'TVD dual lateral horizontal Bakken Formation Test.

Summary: Evaluation of Impacts and Cumulative effects

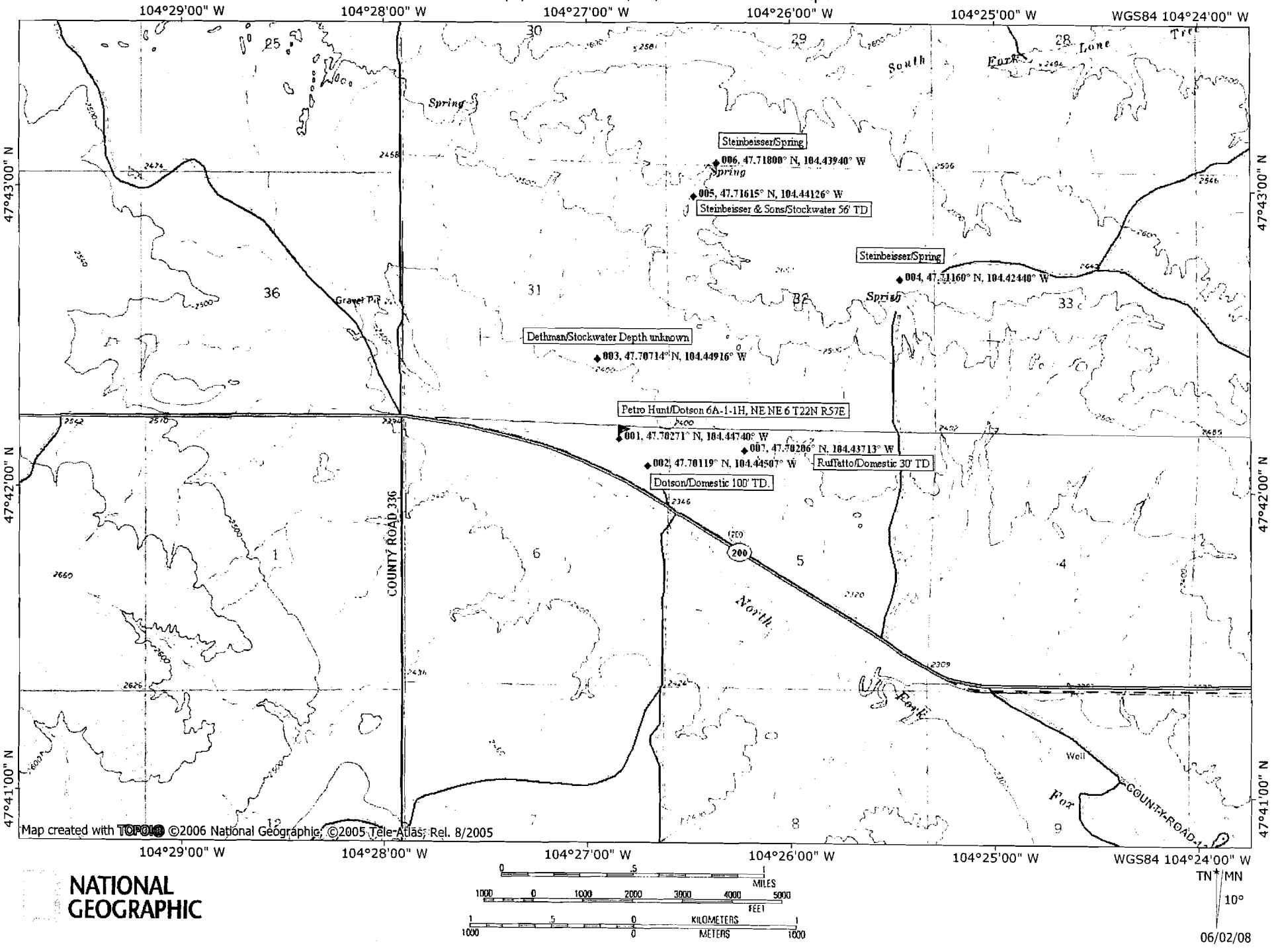
No long term impact expected. Some short term impacts will occur.

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: June 2, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
June 2, 2008
(date)

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

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