

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Stone Energy Corporation
Well Name/Number: Mercer 2-36H
Location: NW NW Section 6 T21N R60E (Surface Location) (Horizontal and Bottom Hole in Section 36 T22N R59E)
County: Richland, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)
Long drilling time 40-50 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 2 Legged Bakken horizontal well 15,614' MD 10,373' TVD and 15,236' MD 10,373' TVD
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: Gas plant available to take associated gas, No special concerns.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface and oil based drilling fluids for intermediate string and saltwater for horizontal leg.
High water table no
Surface drainage leads to live water No, location about 1/8 of a mile south of Devitt Creek ephemeral tributary to the Bennie Peer Creek. This tributary reaches the Bennie Peer Creek about 2.5 miles to the northeast of this location.
Water well contamination no, all water wells shallower than 1719' nearby.
Porous/permeable soils no, 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: 1719' of surface casing cemented to surface adequate to protect freshwater zones to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole.

Soils/Vegetation/Land Use

(possible concerns)
Stream crossings none.

High erosion potential no, moderate cut, up to 27.1' and moderate fill up to 14.7', 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, 300'X700' 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: using existing county roads and existing trails. Access off existing trail, approximately 3185' of new road into this location. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
 Proximity to public facilities/residences None nearby
 Possibility of H2S slight
 Size of rig/length of drilling time Triple drilling rig 40 to 50 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 occurs.

Wildlife/recreation

(possible concerns)
 Proximity to sensitive wildlife areas (DFWP identified) n/a None, identified
 Proximity to recreation sites Little Missouri National Grassland about 1.5 miles to the east 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: Montana Trust Lands surface and minerals. Trust Lands will do surface EA.

Comments: 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: Montana Trust Lands surface and minerals. 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: Second well in the spacing unit. Board Docket 560-2005. no concerns

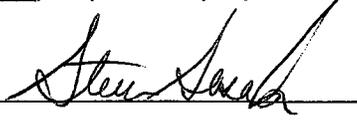
Remarks or Special Concerns for this site

Well is a 15,614' horizontal Bakken formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts 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 3, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

June 3, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____