

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Stone Energy Corporation
Well Name/Number: Anna 1-33H
Location: SW SW Section 33 T22N R59E
County: Richland, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)
Long drilling time 30-40 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for single leg Bakken horizontal well 14,530' MD 10,105' TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, if productive. DEQ air quality permit required.

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 legs.
High water table yes
Surface drainage leads to live water yes, location next to unnamed tributary to the Yellowstone river. This unnamed tributary is an ephemeral drainage. 1/16 mile to the north of this location.
Water well contamination no, all water wells shallower than 1507' 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: 1507' 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 Pitless reserve pit will need to be done with this wellsite.

Soils/Vegetation/Land Use

(possible concerns)
Stream crossings none.

High erosion potential no, small cut, up to 2.9' and small fill required up to 0.4', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of wellsite will be reclaimed.

Unusually large wellsite Large, 300'X400' location size required.

Damage to improvements Slight

Conflict with existing land use/values Slight

Mitigation

Avoid improvements (topographic tolerance)

Exception location requested

Stockpile topsoil

Stream Crossing Permit (other agency review)

Reclaim unused part of wellsite if productive

Special construction methods to enhance reclamation

Other _____

Comments: using existing highways and county roads. Short access off existing county road, approximately 270' of new road into this location. Require remote reserve pit. Location in irrigated land. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences residences ¼ mile east, ½ mile north, and 13/4 of a mile northwest of this wellsite.

Possibility of H2S slight

Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

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 Yellowstone River about 1 mile 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)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

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: _____

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: no concerns

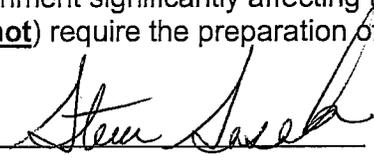
Remarks or Special Concerns for this site

Well is a 14,530' 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: January 31, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells

(subject discussed)

January 31, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____