

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Nadel and Gussman Rockies, LLC
Well Name/Number: Strangford Fee 24-34
Location: SE SW Section 34 T2N R61E
County: Fallon, **MT;** **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time: 30-40 days drilling time

Unusually deep drilling (high horsepower rig): No, triple drilling rig for 9,000' TVD Red River Formation Test Well.

Possible H2S gas production: Yes

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.

Water Quality

(possible concerns)

Salt/oil based mud: Use freshwater and freshwater mud system on surface and oil based invert emulsion mud to TD.

High water table: No

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Boxelder Creek, about 1/4 of a mile to the southwest of this location.

Water well contamination: None, closest water wells are 5/8 of a mile to the south and is only 240' in depth and 3/4 of a mile to the northeast of this location and is only 240' in depth.

Porous/permeable soils: No, silty sandy bentonitic 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: 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 12.2' and small fill, up to 8.5', required.

Loss of soil productivity: No, location will be restored after drilling, in nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: Large, 270'X400' location size required.

Damage to improvements: No, surface use is grazing land.

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: No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None, closest residences about 1 1/2 mile to the west of this wellsite.

Possibility of H2S: Yes

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, residences beyond 1 mile distance. 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): 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: On 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 9,000' vertical Red River formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

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: October 30, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(Name and Agency)

Fallon County water wells

(subject discussed)

October 30, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____