

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

Operator: Sands Oil Company.
Well Name/Number: Wheeler 1-19
Location: NW SE Section 9 T30N R57E
County: Roosevelt, MT; **Field (or Wildcat)** W/C

Air Quality

(possible concerns)

Long drilling time: No, 20 to 30 days drilling time.
Unusually deep drilling (high horsepower rig): No, 9,000'TD
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 – using triple rig to drill to 9,000'TDI

Water Quality

(possible concerns)

Salt/oil based mud: Yes, freshwater and freshwater mud system on surface hole and saltwater mud system on mainhole hole.
High water table: No
Surface drainage leads to live water: None, no drainages within 1 mile of this location. Small either gravel pit filled with water or a very small pot hole lake, about 3/8 of a mile to the northeast of this location.
Water well contamination: No, deepest well nearby is 350' deep. Surface casing will be set at 1500'. Drilled with freshwater and freshwater muds. Surface casing will be run and cemented to surface from 1500'.
Porous/permeable soils: Yes, sandy gravelly 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: 1500' of surface casing cemented to surface not adequate to protect freshwater zones. Recommend 1750' to cover Base Fox Hills Formation.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.
High erosion potential: No, small cut, up to 2.7' and no fill, 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: No, 270'X400' location size required.

Damage to improvements: Slight, surface use appears to be cultivated fields.

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: Will use existing county road, #312. About 1580' of new access road will be built to access this location from county road #312. Drilling and completion fluids will be disposed of in an approved disposal well. Cuttings will be buried in the line pit, after being allowed to dry. No special concern.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest buildings are 5/8 of a mile to the northwest and 1 mile to the southwest of this location. A church and cemetery, about 1/2 mile to the southeast of this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Triple drilling rig/short 20 to 30 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): About 5 miles to the northwest is Medicine Lake National Wildlife Refuge boundary

Proximity to recreation sites: About 5 miles to the northwest is Medicine Lake National Wildlife Refuge, No concerns.

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: 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 lands. No concerns.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: On private lands. No concerns.

Remarks or Special Concerns for this site

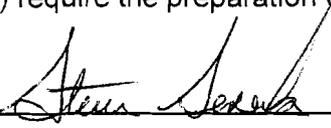
Well is a 9000' TD Ratcliffe/Mission Canyon Formation test.

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: September 26, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Roosevelt County water wells

(subject discussed)

September 26, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____