

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

Operator: Nance Petroleum Corporation
Well Name/Number: Simard 4-36H
Location: NW NW Section 36 T28N R58E
County: Roosevelt, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
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: Existing pipeline for H₂S gas in the area.
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Water Quality

(possible concerns)

Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal hole will be drilled with saltwater. Surface casing hole, freshwater, and freshwater mud system to be used.
High water table Possible
Surface drainage leads to live water No, closest drainage is Shotgun Creek about 5/8 of a mile to the southwest of this location
Water well contamination No problem anticipated all water wells less than 1900' nearby. Closest well is 3/4 of a mile to the northeast of this location. This well will be drilled with freshwater and freshwater muds to 1900' and surface casing will be run and cemented to surface.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

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: 1900' surface casing will be drilled with freshwater and cemented back to surface.

Well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings None
High erosion potential No, location will require a small cut of up to 2' and a small fill of up to 1.1'.

required.

Loss of soil productivity None.

Unusually large wellsite No, large well site 400'X320'

Damage to improvements No, location to be restored after drilling, if nonproductive. If productive unused portion of this drillsite will be reclaimed.

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: Access will be over existing State paved highway No. 2. New access road will be built into this location, about 1/4 of a mile of new road into this location. Oil based drilling fluids will be recycled and any remaining fluids will be trucked to a commercial disposal. Cuttings and solids will be buried on site. The pit will be allowed to dry and the pit backfilled.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Residence about 3/4 mile to the northeast and 5/8 of a mile to the west of this location. The Town of Bainville about 1.25 of a mile to the west of this location.

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: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Ratcliffe formation completions generally does not have high concentrations of H2S associated with it.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a 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 No

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: no concerns

(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

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns

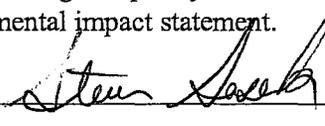
Remarks or Special Concerns for this site

This will be a 13,510' MD 9110'TVD Ratcliffe formation horizontal well.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term impacts will occur, but will be mitigated in 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: June 27, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Water wells in Richland County

(subject discussed)

June 27, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____

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

Social/Economic

(possible concerns)

 Substantial effect on tax base

 Create demand for new governmental services

 Population increase or relocation

Comments: No concerns

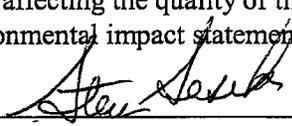
Remarks or Special Concerns for this site

Horizontal Ratcliffe well 13,149' MD. Well is near an existing oil well.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected, some short term impacts will occur, but can be mitigated.

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 27, 2006

Other Persons Contacted:

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(Name and Agency)

Roosevelt County water wells

(subject discussed)

June 27, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____