

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

Operator: Nance Petroleum Corporation
Well Name/Number: Canal 6-4
Location: SE NW Section 4 T23N R59E
County: Richland, MT; Field (or Wildcat) Brorson

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 permit required.

Mitigation:

Air quality permit (AQB review)
 Gas plants/pipelines available for sour gas
 Special equipment/procedures requirements
 Other: _____
Comments: Existing pipeline for H2S in the area.

Water Quality

(possible concerns)

Salt/oil based mud yes to long string salt based drilling fluids. Surface casing hole, freshwater, and freshwater mud system to be used.
High water table No
Surface drainage leads to live water No, closest is and unnamed ephemeral tributary drainage to First Hay Creek about 1/8 of a mile to the northeast of location. First Hay Creek about 3/8 of a mile to the northeast of location.
Water well contamination No, shallow wells within 1/4 mile of this location. Surface hole will be drilled with freshwater and surface casing will be run and cemented from about 1900' back 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 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, moderate cut of up to 10' and moderate fill, up to 23.5', required
Loss of soil productivity None, location to be restored after drilling well.

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 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 county roads. About 3/8 of a mile of access road will be built into this location. Cuttings will be allowed to be buried in the lined reserve pit. Fluids will be hauled to a authorized injection well.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Residence 1/2 mile to the northeast of location and 1 mile to the southeast 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.

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, existing access off county road.

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

No special concerns. Well is a development well in the Canal field.

Summary: Evaluation of Impacts and Cumulative effects

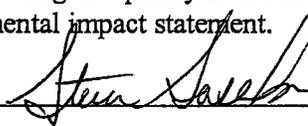
No long term impacts expected. Some short term impacts will occur.

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 25, 2006



Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, GWIC website. (subject discussed)

January 25, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____