

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

Operator: Forest Oil Corporation
Well Name/Number: Ostby 2-34
Location: NE SE Section 34 T31N R58E
County: Sheridan, MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)

Long drilling time No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H₂S gas production yes, possible
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: Existing pipeline for gas in the area.

Water Quality

(possible concerns)

Salt/oil based mud yes, oil based drilling fluids for the main hole. Surface casing hole will be drilled with freshwater, and freshwater mud system.
High water table No
Surface drainage leads to live water yes, pot hole lake 3/4 of a mile south of this location.
Water well contamination None, all water wells nearby shallower than 1750'.
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: 1500' surface casing short. Recommend minimum of 1750' 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 Access is from the south off county roads an access road will be built, about 858' into location off existing well access.
High erosion potential No, a moderate cut, up to 13.3' and moderate fill, up to 11.6', will be required.
Loss of soil productivity None, location to be restored after drilling well, if well is unsuccessful. If successful the unused portion of the wellsite will be restored.
Unusually large wellsite No, large well site 300' X400'
Damage to improvements No, location to be restored after drilling, if well is unsuccessful. If successful

the unused portion of the wellsite will be restored.

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: Cuttings will be buried in the existing lined reserve pit. Fluids will be recycled to another drilling location or hauled to a commercial disposal. Existing access off county road will be used. An existing well access road has been built into a well location to the north. It will require, about 858' of road will be constructed into this location off the existing well access road.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None, within 1 mile of this location.

Possibility of H2S Yes

Size of rig/length of drilling time Triple drilling rig 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: 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.

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

Bakken formation test with a target of the Mission Canyon formation, 10,000' TVD. Existing Mission Canyon producer in the ¼ section to the north.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected with the drilling of this well, some short term impacts are expected.

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 *Steven Sasaki*
(title): Chief Field Inspector

Date: March 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website

(Name and Agency)

Sheridan County water wells

(subject discussed)

March 20, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____