

DEPARTMENT OF NATURAL RESOURCES  
AND CONSERVATION  
BOARD OF OIL AND GAS CONSERVATION

BRIAN SCHWEITZER, GOVERNOR

OIL AND GAS CONSERVATION DIVISION



STATE OF MONTANA

December 31, 2007

Mr. Todd Everts  
Environmental Quality Council  
Room 106, State Capitol  
Helena, MT 59620

**RECEIVED**

JAN 03 2008

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

Re: Environmental Assessment Reports

Dear Todd:

Enclosed please find a copy of the environmental assessments completed by this office covering the period from October 1 through December 31, 2007 with regard to applications for permits to drill oil or gas wells on state and privately owned lands in the State of Montana.

Let us know if you require any further information.

Sincerely,

Thomas P. Richmond  
Administrator

km

Encs. 150

DIVISION OFFICE  
1625 ELEVENTH AVENUE  
PO BOX 201601  
HELENA, MONTANA 59620-1601  
(406) 444-6675

TECHNICAL AND  
SOUTHERN FIELD OFFICE  
2535 ST. JOHNS AVENUE  
BILLINGS, MONTANA 59102-4693  
(406) 656-0040

NORTHERN FIELD OFFICE  
201 MAIN STREET  
PO BOX 690  
SHELBY, MONTANA 59474-0690  
(406) 434-2422

# Montana Board of Oil and Gas Conservation Environmental Assessment

Operator: Oasis Petroleum North America LLC  
Well Name/Number: Bertelsen 44-25H  
Location: SE SE Section 25 T30N R57E  
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 Dual Lateral horizontal well.(Alexander) 13,892'MD/8,943'TVD and (Ratcliffe) 13,894'MD/8,923'TVD.

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 gas in the area.

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## Water Quality

(possible concerns)

Salt/oil based mud: Yes, to long string invert mud (oil based) drilling fluids. Surface hole will be drilled with freshwater, and freshwater mud system to be used. Horizontal hole will be drilled with freshwater.

High water table: No

Surface drainage leads to live water: No, Shotgun Creek drainage 1/2 mile southeast and 1/4 mile to the east is an unnamed ephemeral drainage that drains north 3/4 of a mile to a dry lake bed.

Water well contamination None, closest water wells are over 1 mile distant and are shallower than 1850' surface casing setting depth. Within the section are some water monitoring wells less than 100' in depth.

Porous/permeable soils: No, sandy gravelly bentonitic 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: 1850' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems. Reserve pit will be lined with a 12 mil liner.

## Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None.

High erosion potential: No, small cut, up to 8.8' and no fill, required.

Loss of soil productivity: None, location to be restored, if well is nonproductive. If productive unused

portion of wellsite will be reclaimed.

Unusually large wellsite: No, large well site 290'X380'

Damage to improvements: None, location to be restored, if well is nonproductive. If productive unused portion of wellsite will be reclaimed. Surface use is cultivated field.

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 from existing county road, A short access off an existing county road, about 450' of new access will be built into the location. Oil based drilling fluid will be recycled. Completion fluids will be trucked to a Class II disposal. Drill cuttings and mud solids will be buried in the lined reserve pit. Pit will be backfilled with subsoil when completed.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is about 1 mile to the west northwest and 2 miles to the northwest of this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Triple drilling rig 40 to 50 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): None identified.

Proximity to recreation sites: None identified

Creation of new access to wildlife habitat: None identified

Conflict with game range/refuge management: None identified.

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: No concerns, Private surface lands.

### 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: No concerns. Private surface lands.

**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**

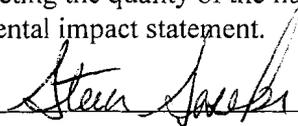
No concerns. This well is a dual lateral horizontal well with one lateral in the Ratcliffe and the second lateral in the Alexander.

**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: September 24, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website

(Name and Agency)

Roosevelt County water wells

(subject discussed)

September 24, 2007

(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_