

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

**RECEIVED**

JAN 03 2008

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

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

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,

A handwritten signature in black ink, appearing to read "T. Richmond".

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:** Nearburg Production Co.  
**Well Name/Number:** Coalridge 1 Brenteson 1  
**Location:** SW SE Section 1 T34N R57E  
**County:** Sheridan, 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, 11,250'TVD Red River Formation test.

Possible H<sub>2</sub>S 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: Associated gas to be flared or if a pipeline is run to a sweetening facility then it can be hooked up.

### Water Quality

(possible concerns)

Salt/oil based mud: Yes to long string, production hole, salt based drilling fluids. Surface casing freshwater, and freshwater mud system to be used.

High water table: No

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Lake Creek, about 3/8 of mile to the northwest of this location.

Water well contamination: None, water wells in the area are 200' or shallower. Significantly shallower than the surface casing setting depth of 2000'. Surface hole will be drilled with freshwater. Steel surface casing will be run to 2000' and cemented to surface. Closest water well are, about 1/4 mile to the southeast from this location and 3/8 of a mile to the northwest of this location.

Porous/permeable soils: No, sandy gravelly glaciated 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: 2000' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

### Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: None

High erosion potential: No, location will require a moderate cut of up to 15.4' and moderate fill, up to 10.3', required.

Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of wellsite will be reclaimed.

Unusually large wellsite: No, large well site 300'X400'

Damage to improvements: Slight, surface use is 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 roads, FAS 516. About 689' of new access road will be built into this location off county road. Cuttings will be buried in the lined reserve pit. Drilling fluids will be removed to commercial disposal or recycled to the next location. Pit will be allowed to dry after all fluids have been removed. The pit after drying will be backfilled. No concerns.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Residences 3/8 of a mile to the southeast, 1/2 of a mile to the northwest and 1/2 of a mile to the west. Town of Coalridge is about 2 miles 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. Sufficient distance between location and buildings noise should not be a problem.

### 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: No

Conflict with game range/refuge management: No

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: 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: Surface location is private land. No Concerns.

**Social/Economic**

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns

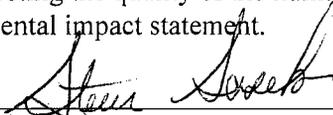
**Remarks or Special Concerns for this site**

No concerns.

**Summary: Evaluation of Impacts and Cumulative effects**

Short term impacts expected, no long term impacts anticipated.

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: October 18, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center GWIC website

(Name and Agency)

Sheridan County water wells

(subject discussed)

October 17, 2007

(date)

If location was inspected before permit approval:

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

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

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