# Montana Board of Oil and Gas Conservation
# Environmental Assessment

**Operator:** Bill Barrett Corporation
**Well Name/Number:** Bodine-Williams 7-28
**Location:** SW NE Section 28 T5N R8E
**County:** Park, **MT; Field (or Wildcat)** Wildcat

## Air Quality

(possible concerns)
Long drilling time: No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig): Yes, small triple or double derrick drilling rig 600-900 HP. Total Drilling Depth is estimated at 7,575'TD.
Possible H2S gas production: No, Cretaceous Muddy formation.
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:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Required only if well is productive.

## Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater, and freshwater mud system to be used only.
High water table: No
Surface drainage leads to live water: Yes, closest drainage is an unnamed ephemeral drainage to Potter Creek, about 1/16 of a mile to the southwest of this location.
Water well contamination: None, closest water wells are about 1 mile or further away from this location and are shallow, 120'or less in depth.. Surface hole will be drilled with freshwater and freshwater mud, steel surface casing will be set to 1000' and cemented to surface from 1000'.
Porous/permeable soils: Yes, rocky sandy soils.
Class I stream drainage: No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1000' surface casing well below freshwater zones in nearby water wells. Adequate surface casing and BOP equipment will be set and used. Pit liner will be used in the reserve pit.

## Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No stream crossings required.
High erosion potential : No, small cut, up to 5.6' and small fill of 4.8', required.
Loss of soil productivity: None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: No, large well site 380'X290'

Damage to improvements: Slight, surface use is grassland..
Conflict with existing land use/values: Slight.

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be from existing State Highway 89, about 2290' of new access will be built into this new location. From Highway 89 all lands crossed until location is reached is private lands. Reserve pit will be lined with a minimum 12 mill liner. Drilling fluids will be freshwater and freshwater mud system. Fluids will either be removed from the reserve pit and disposed of or will be allowed to dry in the reserve pit. Reserve pit solids will be either fly ashed or solibonded prior to pit closure. Pit will then be backfilled with subsoil and final cover will be topsoil.

**Health Hazards/Noise**

(possible concerns)
Proximity to public facilities/residences: Closest residence is 1/2 of a mile to the northwest, 1 1/8 of a mile to the southwest and 1 ½ miles to the southeast of this location. The Wilsall airport is about 9.5 mile to the southeast of this location. The town of Wilsall is about 15 miles to the southeast of this location.
Possibility of H2S: No
Size of rig/length of drilling time: Small triple or large double drilling rig 20 to 30 days drilling time.

Mitigation:

X 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: Cottonwood Reservoir about 8.5 miles to the southeast from this location.
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: Area from highway 89 into this location is private lands. Lands surrounding the wellsite are private 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: Private surface lands. No concerns

**Social/Economic**

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns at this time. Well is a wildcat.

**Remarks or Special Concerns for this site**

Well is a 7,575' Muddy formation wildcat well. The nearest town is Wilsall, MT about 15 miles to the southeast and the town of Ringling, MT is about 9 miles to the northwest of this well location. Distance from these towns should mitigate any problems.

**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: April 14, 2008
Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website
(Name and Agency)
Park County water wells
(subject discussed)
April 14, 2008
(date)

If location was inspected before permit approval:
Inspection date: 4/17/08
Inspector: Alan Olson
Others present during inspection: James Brewer