

Montana Board of Oil and Gas Conservation Environmental Assessment

Operator: Bill Barrett Corporation
Well Name/Number: Swandal Ranch 14-26
Location: SE SW Section 26 T4N 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 7550'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:

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 Cottonwood Creek, about 1/8 of a mile the north and to the east of this location.

Water well contamination: None, closest water well is about 1/4 of a mile to the west and 3/4 of a mile to the south from this location and are shallow, 200' 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: No, rocky sandy 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: 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)

Stream crossings: No stream crossings required.

High erosion potential: No, moderate cut, up to 12.2' and small fill of 3.9', 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
- 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 State Highway 89, about 1290' 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 7/8 of a mile to the west northwest of this location. The Wilsall airport is about 1 mile to the southeast of this location. The town of Wilsall is about 5 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:

- 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 1.5 miles to the south 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)

