

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

Operator: Primary Petroleum Corporation
Well Name/Number: Primary Second Guess 16-2
Location: SE SE Section 2 T26N R7W
County: Teton, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 4 to 5 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig, to drill to 3288' TD.

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 rule 75-2-211.

Mitigation:

Air quality permit (AQB review)

Gas plants/pipelines available for sour gas

Special equipment/procedures requirements

Other: _____

Comments: No special concerns – using small rig to drill to 3326' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system. Mainhole drilled with air, air/mist and freshwater/mud.

High water table: No

Surface drainage leads to live water: Yes, closest drainage is an unnamed ephemeral tributary drainage to Soap Creek which is a tributary to Blackleaf Creek. These unnamed ephemeral drainages are about 1/8 of a mile to the east of this location.

Water well contamination: None, closest water well is about 3/8 of a mile to the northeast from this location. Depth of water well is 140'. This well will set 340' of 7" surface casing to protect shallow ground waters.

Porous/permeable soils: No, sandy bentonitic soils.

Class I stream drainage: None

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: 340' of surface casing cemented to surface adequate to protect freshwater zones and if productive 4 1/2" casing to be run back to surface. Air, air/mist and freshwater mud to be used to drill the mainhole.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None

High erosion potential: No, small cut, up to 9.1' and moderate fill, up to 11.0', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 300'X300' location size required.

Damage to improvements: Slight, appears to be 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 over existing county road, Cambell Cutacross Road and existing ranch trails. About 1/2 of a mile of new access road will be built into this location off the existing ranch trails. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be mixed -bury-cover reclamation method. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby, nearest residence is 3/8 of a mile to the northeast and 1.5 miles to the northwest of this location.

Possibility of H2S: Yes

Size of rig/length of drilling time: Small drilling rig/short 4 to 5 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: No concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: 6 miles to the south to Bynum Reservoir and 7.5 miles to the west is Blackleaf State Wildlife Management Area boundary.

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: 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

Remarks or Special Concerns for this site

Well is a 3288' TD Madison Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

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: January 16, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Teton County Water Wells

(subject discussed)

January 16, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____