

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

Operator: Big Snowy Resources, LP

Well Name/Number: Barber Price 8-1

Location: NW NW NW Section 8 T3S R25E

County: Yellowstone, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No small single derrick drilling rig, 1150' TD.

Possible H₂S gas production: None

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: No special concerns – using small rig to drill to 1150' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater or freshwater mud system and/or air/mist.

High water table: No

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Spring Creek, about 1/8 of a mile to the west southwest of this location.

Water well contamination: No, closest water well is over a 1 mile away from this location. If productive 4 1/2" production casing will be cemented.

Porous/permeable soils: No, sandy bentonitic soils.

Class I stream drainage: No

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: 60' of surface casing cemented to surface adequate to protect freshwater zones. Also, air and/or fresh water mud systems to be used. 4 1/2" production casing will be cemented.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: No, crossings.

High erosion potential: No, no cut and no fill required. Will be using small self leveling drilling rig.

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

Unusually large wellsite: No, 100'X100' location size required.

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: Surface access will be over existing county roads and existing two track roads. A short access road will be built off an existing county road, about 950' new access road.. Cuttings will be buried in the earthen pit. Fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Yes, 2 miles to the north of this wellsite.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: Diverter head will be used instead of a BOP.

Comments: Wahington Rotating Control Diverter head Model 3022. Diverter will be used instead of a BOP. No concerns.

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: 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 1150' Greybull Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected. Some short term surface impacts will occur, but will be mitigated in 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: April 11, 2008



Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC
website

(Name and Agency)

Water wells in Yellowstone County

(subject discussed)

April 11, 2008
(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____