

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

Operator: Pinnacle Gas Resources, Inc.
Well Name/Number: 5-5-7-40
Location: SW NW Section 5 T7S R40E
County: Big Horn, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time no, 2 to 3 days drilling time.

Unusually deep drilling (high horsepower rig) no, small single derrick drilling rig, 1400' TD

Possible H2S gas production no

n/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: _____ wells flaring methane gas temporarily during initial stages of production. Flaring of commercial quantities of gas is prohibited.

Water Quality

(possible concerns)

Salt/oil based mud no, freshwater and freshwater mud system.

High water table no

Surface drainage leads to live water Tongue River

Water well contamination Closest water well is 1 mile away.

Porous/permeable soils localized

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: _____ will use fresh water, native clay mud. Exploration well many not produce until included in development POD.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no

High erosion potential no

Loss of soil productivity no

Unusually large wellsite no, 150'X150' location size required.

Damage to improvements no

Conflict with existing land use/values no

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: no special concerns for this site. Very small location and pit area. Truck mounted rig does not require much location preparation. Drilling fluids will be allowed to dry in the unlined pits. Cuttings will be buried in the earthen pits, after being allowed to dry. Access will be over existing county roads and existing two track trails.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby.

Possibility of H2S none

Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: no special concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.

Proximity to recreation sites none in the immediate area

Creation of new access to wildlife habitat no

Conflict with game range/refuge management no

Threatened or endangered Species no

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: Tongue River Reservoir is closest public recreation area.

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: location on fee surface

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Exploration test well targeted Wall, Brewster, Arnold, King, Flowers- Goodale coal beds at 1400'. May not produce until included in an approved Plan of Development, therefore no social or economic impacts are likely—cumulative effects on socio-economics of the region are described in 2003 Statewide EIS.

Remarks or Special Concerns for this site

Well is a shallow coal bed methane test. Wells are drilled with a small rig and casing set to the top of the coal. Seven inch casing is cemented surface. Partial de-watering is expected to reduce pressure and release methane gas to the cleat system; this partial de-watering is expected to reduce, but not eliminate water in the coal aquifer. The water quality in the coal bed aquifer wells is variable—this test well will provide water quality data for the tested interval.

Summary: Evaluation of Impacts and Cumulative effects

Relatively minor impacts associated with this well, which cannot produce until included in an approved POD. Well is part of ongoing development near Coal Creek Project and could use existing production facilities. No impacts are expected which differs significantly from those described in the EIS.

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: June 8, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Big Horn County

(subject discussed)

June 8, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____