

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Petro Hunt, LLC
Well Name/Number: BR 19C-4-1
Location: SE SW Section 19 T23N R52E
County: Richland, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)
Long drilling time 20-30 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 10,830' 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 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, adequate surface casing 2000' to be set and cemented back to surface with proper BOP stack should mitigate any concerns. Triple rig to drill to 10,830'.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface and oil based mud system from base of surface casing to TD.
High water table no
Surface drainage leads to live water no, closest drainage is a ephemeral tributary drainage to South Fork Lisk Creek, about 3/8 of a mile to the south of this location.
Water well contamination no, closest water well is about 1/2 mile away. Deepest water well closed by is only 220' in depth, surface casing will be drilled with freshwater, casing set to 2000' and cemented back to surface.
Porous/permeable soils no, bentonite 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: 2000' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used on surface hole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none.
High erosion potential no, small cut, up to 8.3' and moderate fill, up to 22.5', 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 Large, 400'X350' location size required.
Damage to improvements slight
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 roads and existing trails. About 300' of new access will be built off the existing trail into this location. Reserve pit liquids to be disposed of at Indian Mounds SWD. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of this drillsite.
Possibility of H2S yes
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time
Mitigation:
 Proper BOP equipment
 Topographic sound barriers
 H2S contingency and/or evacuation plan
 Special equipment/procedures requirements
 Other: _____
Comments: no concerns, no residences within 1 mile of this wellsite. H2S safety company to setup alarms and train rig employees. Proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a
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 no
Mitigation:
 Avoidance (topographic tolerance/exception)
 Other agency review (DFWP, federal agencies, DSL)
 Screening/fencing of pits, drillsite

Other: _____
Comments: 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: on private land

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 10,830' Red River formation test

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 27, 2006



Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
April 27, 2006
(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____