

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: J. Burns Brown Operating Company
Well Name/Number: Richardson 33-37-8B
Location: SE NE Section 33T37N R8E
County: Hill, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)
Long drilling time no
Unusually deep drilling (high horsepower rig) no, 3500' TD
Possible H2S gas production yes
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) yes, if productive. DEQ air quality permit required.

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 3500'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed ephemeral tributary drainage to Sage Creek about 1/8 of a mile to the south of this location.
Water well contamination no, closest water well is about 1/2 mile to south and is only 108' deep. This oil well will drill 150' of hole with freshwater and freshwater mud. 150' of surface casing will be set and cemented..
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: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Stream crossings no
High erosion potential no, small cut of up to 5' and small fill, up to 6', 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, 250'X250' 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 along existing county roads to within about 600' of the location. About 600' of new access to be built into location. Cuttings will be buried in the unlined reserve pit. Fluids will be hauled to a nearby private stock pond as sealant. Pit will then be backfilled. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby, closest residence is 1/2 mile to the southwest and 1 mile to the northwest of this location.

Possibility of H2S yes

Size of rig/length of drilling time Small drilling rig/short 7 to 10 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: H2S present, but generally in low concentrations. Use standard safety procedures and working BOP. No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a

Proximity to recreation sites none

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

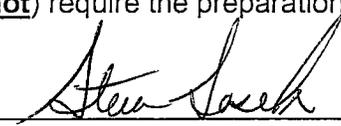
Remarks or Special Concerns for this site

Well is a 3500' Sawtooth formation test in an existing Sawtooth gas field, Canadian Coulee

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: February 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Hill County water wells

(subject discussed)

February 16, 2006
(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____