

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

Operator: Hanna Oil & Gas Company.
Well Name/Number: Bielland 1-18
Location: NW NE Section 18 T28N R2E
County: Pondera MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 10 to 14 days drilling time.
Unusually deep drilling (high horsepower rig): No, single derrick drilling rig, to drill to 4000' 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 – using small rig to drill to 4000' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, air, air mist, and/or freshwater drilling mud system.
High water table: No
Surface drainage leads to live water: No, closest drainage is an ephemeral drainage Pondera Coulee, about 1/16 of a mile to the east of this location. Within this drainage is a stock pond, about 1/2 mile to the south of this location.
Water well contamination: No, no water wells within 1 mile of this location.
Porous/permeable soils: No, sandy clay 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: 300' of surface casing will be set and cemented to surface adequate to protect freshwater zones. Also, air mist/freshwater gel mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.

High erosion potential: No, location will require a small cut, up to 1.1' and a small fill, up to 0.9', 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, small location, 200'X200' 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: Access will utilize existing county roads, Sollid Road and Byrd Road and existing two track section line road. About 1300' of new access off existing two track section line road will have to be constructed into this location. Drilling fluids will be allowed to evaporate. Drill cuttings will be buried in the existing earthen pit. Pit will be allowed to evaporate and cutting to dry before pit is backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence/ buildings about 5/8 of a mile to the south of this location. Nearest cemetery, about 1 miles to the northwest of this location.

Possibility of H2S: Yes

Size of rig/length of drilling time: Small drilling rig/short 10 to 14 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 from well to residences is sufficient to mitigate noise concerns and 300' of surface casing with an operation BOP will mitigate any problems.

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: None identified

Conflict with game range/refuge management: None identified

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: No concerns. Private surface lands.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified, private surface.

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.

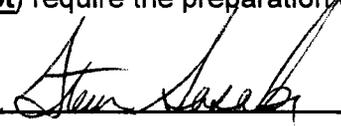
Remarks or Special Concerns for this site

Well is a vertical, 4000' Madison Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No, significant impacts expected, some short term impacts are expected, but should be able to mitigate these short term impacts.

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 2, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Pondera County water wells

(subject discussed)

June 2, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____