

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

Operator: Highline Exploration, Inc.
Well Name/Number: G. Herman, 34-17
Location: SE NW Section 17 T1S R32E
County: Big Horn, MT; Field (or Wildcat) Toluca

Air Quality

(possible concerns)

Long drilling time : No, 2 to 3 days drilling time.
Unusually deep drilling (high horsepower rig): No, 860' 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 single rig to drill to 860' TD.

Water Quality

(possible concerns)

Salt/oil based mud: Surface hole will be drilled with freshwater. Air will be used out from under surface casing to total depth.
High water table: No
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage to Peritsa Creek, about 1/16 of a mile northeast of this location. Within this unnamed drainage are stock ponds.
Water well contamination: No, water wells within 1 mile of this location. Surface casing will be set at 80'. Drilled with freshwater. Surface casing will be run and cemented to surface from 80'.
Porous/permeable soils: No, sandy-silty 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: 80' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, crossing.
High erosion potential: No, cut or fill need. Small single derrick self leveling rig will be used.

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, 100'X100' location size required. Will be using a self leveling drilling rig, so very little dirt work is required.

Damage to improvements: None, surface use is grazing land.

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: Will use existing county freeway frontage road, two track ranch trails and pipeline right of way road. About ¼ of a mile of new access road will be built from the pipeline right of way road into this location. Cutting will be buried in the earthen pits. Pits will be backfilled when dry. No special concern.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest buildings are about 3.5 miles to the southeast and the town of Hardin is 8.5 miles to the southeast of this location.

Possibility of H2S: None

Size of rig/length of drilling time: Single drilling rig 2 to 3 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: Will use a diverter and knife valve instead of a BOP. Due to the low pressure gas zone anticipated.

Comments: No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: No 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: On 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 860' Frontier (Belle Fourche) Formation test, within the Toluca Gas Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact 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: October 30, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Big Horn County water wells

(subject discussed)

October 30, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____