

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

Operator: Highline Exploration, Inc.

Well Name/Number: Schlutz. 58-11

Location: NE SE Section 11 T1S R31E

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, single derrick drilling rig to drill to 1020' TD.

Possible H2S gas production: None anticipated.

In/near Class I air quality area: No, Class I air quality area, Nearest Class I air quality area would be on the Crow Indian Reservation. Reservation boundary is about 5 miles to the south from this location.

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: Gas gathering line and compressor plant available to handle sweet gas.

Comments: No special concerns – using single rig to drill to 1020' TD.

Water Quality

(possible concerns)

Salt/oil based mud: Surface hole will be drilled with freshwater or air, Rule 36.22.1001.

Air will be used out from under surface casing to total depth.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Williams Coulee, about 1/16 of a mile southwest and about 1/16 of a mile to the south from this location. Within this unnamed ephemeral drainage there are stock ponds.

Water well contamination: No, water wells within 1 mile from this location, but there are some shallow monitoring wells, about 1 mile to the southwest from this location. Surface casing will be set at 150'. Drilled surface hole with freshwater or air, Rule 36.22.1001.

Surface casing will be run and cemented to surface from 150', Rule 36.22.1001.

Porous/permeable soils: No, sandy bentonitic soils.

Class I stream drainage: No Class I stream drainages in the area of review.

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, Rule 36.22.1001.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

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 rig, so very little dirt work is required.

Damage to improvements: None

Conflict with existing land use/values: Slight, surface use is grassland.

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 frontage road and lease roads. A short access road will be built from the existing lease road into this location, about ¼ of a mile of new road. Cutting will be buried in earthen pits. Pits will be backfilled when dry. No special concern.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No buildings or residences within a 1 mile radius from this location.

Possibility of H2S: None anticipated.

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 and low volume gas zone anticipated.

Comments: Adequate surface casing and diverter should prevent any problems. 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: Threatened or endangered species is the Black-footed Ferret. Candidate species are the Greater Sage Grouse and the Sprague's Pipit.

NH Tracker website lists two (2) species of concern. They are as follows, Black-tailed Prairie Dog and Greater Sage Grouse.

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DSL)
- Screening/fencing of pits, drillsite
- Other: _____

Comments: Private surface lands. There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

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. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

Social/Economic

(possible concerns)

- Substantial effect on tax base
- Create demand for new governmental services
- Population increase or relocation

Comments: Development well within an established gas field, Toluca Gas Field.

No concerns

Remarks or Special Concerns for this site

Well is a 1020' Belle Fourche Formation gas development well, 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): /s/Steven Sasaki
(title:) Chief Field Inspector
Date: September 28, 2012

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Big Horn County water wells
(subject discussed)
September 28, 2012
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Big Horn County
(subject discussed)

September 28, 2012
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T1S R31E
(subject discussed)

September 28, 2012
(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____