

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION
BOARD OF OIL AND GAS CONSERVATION

BRIAN SCHWEITZER, GOVERNOR

OIL AND GAS CONSERVATION DIVISION



STATE OF MONTANA

December 31, 2007

RECEIVED

JAN 03 2008

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Mr. Todd Everts
Environmental Quality Council
Room 106, State Capitol
Helena, MT 59620

Re: Environmental Assessment Reports

Dear Todd:

Enclosed please find a copy of the environmental assessments completed by this office covering the period from October 1 through December 31, 2007 with regard to applications for permits to drill oil or gas wells on state and privately owned lands in the State of Montana.

Let us know if you require any further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas P. Richmond".

Thomas P. Richmond
Administrator

km

Encs. 150

DIVISION OFFICE
1625 ELEVENTH AVENUE
PO BOX 201601
HELENA, MONTANA 59620-1601
(406) 444-6675

TECHNICAL AND
SOUTHERN FIELD OFFICE
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102-4693
(406) 656-0040

NORTHERN FIELD OFFICE
201 MAIN STREET
PO BOX 690
SHELBY, MONTANA 59474-0690
(406) 434-2422

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

Operator: Highline Exploration, Inc.
Well Name/Number: Harkis 8-10
Location: SE NE Section 10 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, 920' 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 920' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater mud for surface hole. Air out from under surface pipe to TD.
High water table: No
Surface drainage leads to live water: No, closest drainage is and unnamed ephemeral tributary to the South fork Whitman Coulee ephemeral drainage, about 1/4 of a mile southeast from this location.
Water well contamination: No, closest water well is about 3/4 of a mile to the northwest of this location. The well is 3740' in depth, probably in the Madison formation. Surface casing will be set at 80'. Drilled with freshwater mud. Surface casing will be run and cemented to surface from 80'.
Porous/permeable soils: No, sandy 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 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.

Damage to improvements: Slight, surface use is a cultivated field.

Conflict with existing land use/values: Slight, surface use is a cultivated field.

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 road and existing ranch roads. About 1 mile of new access road will be built from the county road into this location. Cuttings 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 1.5 miles to the southeast and the town of Hardin is 6 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 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: None 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. 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: Private surface. No concerns.

Social/Economic

(possible concerns)
 Substantial effect on tax base
 Create demand for new governmental services
 Population increase or relocation
Comments: No concerns. Well is a development gas well within an existing gas field, Toluca Gas Field.

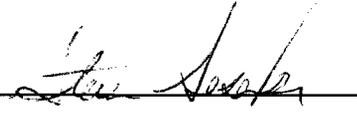
Remarks or Special Concerns for this site

Well is a 920' Frontier (Belle Fourche) Formation test.

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 10, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Big Horn County water wells
(subject discussed)
October 10, 2007
(date)

If location was inspected before permit approval:
Inspection date: _____

Inspector: _____

Others present during inspection: _____

6/11/10

10/10