

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:** J. Burns Brown Operating Company  
**Well Name/Number:** Lucke 7-32-15  
**Location:** SE SW Lot 7 Section 7 T32N R15E  
**County:** Hill, MT; **Field (or Wildcat)** Wildcat (Tiger Ridge)

**Air Quality**

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.  
Unusually deep drilling (high horsepower rig): No, 2,400' TD  
Possible H2S gas production: No  
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 2400' TD

**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 Big Sandy Creek, about 1/16 of a mile to the east of this location.  
Water well contamination Closest water well is about 1/4 of a mile to the south-southeast of this location and is 175' in depth. Recommend setting 190' of surface casing.  
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: Recommend setting 190' of surface casing instead of 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, moderate cut, up to 13.0' and small fill, up to 6.0', 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 over existing county road. A short access road will be built into this location of about 5/8 of a mile. Cuttings will be buried in the unlined pit. Mud fluids will be disposed of in a nearby stock pond for sealant, with surface owner approval. Earthen pits will be backfilled when dry. No special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby, closest residences, 1 mile to the northeast and 1 5/8 of a mile to the east from this location. Sunset Garden Park Cemetery is about 2 miles to the northeast from this location. The Havre Airport is 3 miles to the east from this location. The town of Havre is about 5 miles to the east from this location.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: \_\_\_\_\_

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: None

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 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: Private 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. Exploratory well in an existing gas field, Tiger Ridge Gas Field.

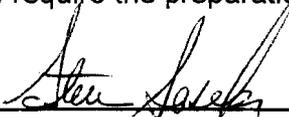
**Remarks or Special Concerns for this site**

Well is a 2400' Niobrara formation test.

**Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

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)

Hill County water wells

(subject discussed)

October 10, 2007

(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_