

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,

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:** Flying J Oil & Gas, Inc.  
**Well Name/Number:** Wexels 1-23H  
**Location:** NE NE Section 23 T36N R52E  
**County:** Sheridan, **MT;** **Field (or Wildcat)** Wildcat (Outlook)

**Air Quality**

(possible concerns)

Long drilling time: No, 30 to 40 days drilling time.  
Unusually deep drilling (high horsepower rig): 900 HP Triple Derrick Drilling rig, 13,692' MD and 13,358'MD.  
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 large sized rig to drill to 13,692' MD and 13,358'MD dual lateral Winnipegosis formation horizontal well.

**Water Quality**

(possible concerns)

Salt/oil based mud: Yes, freshwater and freshwater gel polymer mud system on surface hole. Mainhole invert mud system. Freshwater on horizontal lateral.  
High water table: No  
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Muddy Creek, ephemeral drainage, about 1/4 of a mile to the south and southeast of this location. Appears stock pond built in creek bottom based upon the topo sheet, about 3/4 of a mile to the southwest in this drainage.  
Water well contamination: No, surface hole will be drilled with freshwater and surface casing set and cemented to surface at 2000'. Closest water well is 1 mile to the east.  
Porous/permeable soils: No, sandy rocky 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: 2000' 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)

Steam crossings: No

High erosion potential: No, small cut, up to 4.0' and small fill, up to 9.8', 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, 265'X360' 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: Will use existing county road to within 1.25 miles of this location. Will use existing section line road and trail into the Ruegsegger 4-24H well location for the Wexels 1-23H well location. No additional access will be built. Cuttings will be buried on site in the lined reserve pit. Liquids will be recycled to another location or hauled to saltwater disposal facility. No special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Closest residence is 1 mile to the east of this location. The town of Outlook about 5 miles to the northeast and 5 miles to the southwest.

Possibility of H2S: Slight

Size of rig/length of drilling time Triple drilling rig 35 to 45 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 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: Private Land 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 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

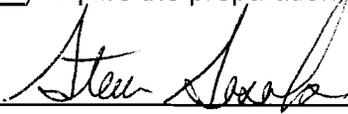
**Remarks or Special Concerns for this site**

Well is a 13,692' MD and 13,358'MD dual horizontal legged Winnipegosis Formation test.

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

No, long term impacts 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 5, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website  
DNRC Water Rights website

(Name and Agency)

Sheridan County water wells

(subject discussed)

September 21, 2007

(date)

If location was inspected before permit approval:

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

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

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