

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

Operator: Devon Energy Production Company
Well Name/Number: Olson-DIR 27-13
Location: SW SW Section 27 T31N R17E
County: Blaine, MT; **Field (or Wildcat)** Tiger Ridge Field

Air Quality

(possible concerns)

Long drilling time: No, 3-4 days drilling time
Unusually deep drilling (high horsepower rig): No, 2500'TVD/2750'TMD, single derrick drilling rig.
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 rule 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 2500'TVD/2750'TMD.

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, unnamed ephemeral tributary drainage to Little Boxelder Creek, about 1/4 of a mile to the southwest and 1/8 of a mile to the east of this location.
Water well contamination: No, closest water well is about over 1 mile from this location. Surface casing will be drilled with freshwater and surface casing set and cemented from 150'. Production string will be cemented back to surface.
Porous/permeable soils: No, silty 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: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: None

High erosion potential: Possible, small cut required up to 3.0' and small fill, up to 7.0', 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, 225'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 roads and existing ranch trails.

About 3/8 of a mile of access road will be built into this location off an existing ranch trail.

Cuttings will be disposed of in the unlined earthen pits. Drilling fluids will be trucked to nearby stock pond and disposed of with surface owner approval. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residences, within 1 mile of 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: 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: No concerns. 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: No concerns. On private surface lands.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns. Development gas well within the Tiger Ridge Gas Field.

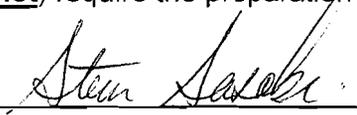
Remarks or Special Concerns for this site

Well is a 2500'TVD/2750'TMD Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

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

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: June 9, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Blaine County water wells.

(subject discussed)

June 9, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____