Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, LP
Well Name/Number: Boyce-DIR 24-11
Location: SE SW Section 24 T30N R15E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TVD 2750' TMD
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:
X 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, closest drainage is an unnamed ephemeral tributary drainage to Beaver Creek, 1/8 mile to the west and east of this location.
Water well contamination no, closest water well is over 1 mile away.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X 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. If productive production casing will be cemented to surface. Drilling fluids will be trucked to nearby stock pond and disposed of with surface owner approval.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, large cut, up to 39' and large fill, up to 32.0', 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
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads and existing trails. About 1/2 of a mile of new access will be built into this location from an existing two track trail. Cuttings will be disposed of in the unlined earthen pits. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residences with 1mile to the northwest of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
_X_ 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) n/a None identified.
Proximity to recreation sites Beaver Creek County Park boundary about 2.25 miles to the east of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

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

Comments: Private surface location.

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 location

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Development well within an existing gas field, Tiger Ridge gas field. No concerns

Remarks or Special Concerns for this site

Well is a 2500' TVD 2750' TMD Eagle Formation test. Same well pad for the Boyce-DIR 24-13.

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 Steven Sasaki

(title:) Chief Field Inspector

Date: May 22, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Hill County water wells
(subject discussed)
May 23, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____