

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

Operator: FX Drilling Company, Inc.
Well Name/Number: Matz No. 4-1
Location: NW NW SW Section 4 T25N R1E
County: Teton MT; Field (or Wildcat) Bannatyne

Air Quality

(possible concerns)

Long drilling time: No, 4 to 5 days drilling time.
Unusually deep drilling (high horsepower rig): No, 1560' Swift/1780' Madison TVD.
Possible H2S gas production: Slight
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: Using small rig to drill to 1560' Swift/1780' Madison TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system.
High water table: None
Surface drainage leads to live water: No, closest surface drainage is an unnamed ephemeral tributary drainage to the Teton River, about 1/8 of a mile to the southwest of this location. Surface casing will be set to 150' and cemented to surface. Production casing if set will an External Casing Packer and 50 sacks of cement.
Water well contamination: None, no water wells within 1 mile of this location.
Porous/permeable soils: No, silty 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 9 5/8" surface casing cemented to surface adequate to protect freshwater zones. Air, freshwater and fresh water mud systems to be used for drilling. 7" production casing will use an External Casing Packer and 50 sacks of cement.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.
High erosion potential: No, small cut, up to 4.5' and a small fill, up to 4.0', 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, small 200'X200' location size required.

Damage to improvements: Slight, surface is cultivated land (CRP).

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 gravel roads, 24th Road NE and existing oilfield access road. Will construct about 300' of new road into this location. Cuttings will be buried in the earthen reserve pit. Fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residences within 1 mile of this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Small drilling rig/short 4 to 5 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: No concerns. Distance should mitigate any noise issues.

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 land.

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. 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. Existing Oil and Gas Field, Bannatyne Oil Field.

Remarks or Special Concerns for this site

Well is a 1560' Swift/1780' Madison formation test.

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: December 18, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Teton County water wells

(subject discussed)

December 18, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____