

Montana Board of Oil and Gas Conservation  
Environmental Assessment

Operator: PT Energy LLC  
Well Name/Number: Zelenka PT5-1  
Location: SW NW Section 1 T31N R3E  
County: Toole, MT; Field (or Wildcat) WC

Air Quality

(possible concerns)

Long drilling time no, 4 to 5 days drilling time.  
Unusually deep drilling (high horsepower rig) no, 2400' TD  
Possible H2S gas production yes  
n/near Class I air quality area no  
Air quality permit for flaring/venting (if productive) Yes, If productive for oil. DEQ air quality permit required if productive.

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'

Water Quality

(possible concerns)

Salt/oil based mud no, air/mist, freshwater and freshwater mud system.  
High water table no  
Surface drainage leads to live water no, closest drainage is Galata Ravine, an ephemeral drainage, about a 1/4 of a mile to the east and southeast of this location.  
Water well contamination no, none nearby.  
Porous/permeable soils no, bentonite 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: 200' 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, stream crossing.  
High erosion potential no, small cut, up to 2.5' and small fill, up to 0.9' 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, 200'X200' location size required.

Damage to improvements slight, surface use is CRP.

Conflict with existing land use/values Slight, surface use is CRP.

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 to location will be over existing county gravel roads. About 2500' of new access road will be built into this location. Cutting will be buried on site in the drilling pits. Fluids will be evaporated. Pits will then be backfilled. no special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Residence about 3/4 of a mile to the southeast of this location. The town of Galata is 2 3/4 miles to the west of this location.

Possibility of H2S yes

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

### Wildlife/Recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.

Proximity to recreation sites no

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: 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 surface.

**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 2400' Madison Formation test.

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

No long term impacts expected. Some short term impacts are expected, which can be mitigated in 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: February 21, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells

(subject discussed)

February 21, 2006

(date)

If location was inspected before permit approval:

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

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

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