

Montana Board of Oil and Gas Conservation  
Environmental Assessment

Operator: Fidelity Exploration and Production Co.  
Well Name/Number: Spring Creek 22RBT-180  
Location: SE NW 31 T8S R40E  
County: Big Horn, MT; Field (or Wildcat) Wildcat

**Air Quality**

(possible concerns)

Long drilling time no  
Unusually deep drilling (high horsepower rig) no  
Possible H2S gas production No  
In/near Class I air quality area no  
Air quality permit for flaring/venting (if productive) no

Mitigation:

- Air quality permit (AQB review)
- Gas plants/pipelines available for sour gas
- Special equipment/procedures requirements
- Other: \_\_\_\_\_

Comments: wells flare methane gas temporarily during initial stages of production. Flaring of commercial quantities of gas is prohibited.

**Water Quality**

(possible concerns)

Salt/oil based mud No  
High water table no  
Surface drainage leads to live water Tongue River  
Water well contamination no  
Porous/permeable soils localized  
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: will use fresh water, native clay mud. Water/mud re-cycled to next location. Exploration well - may not produce until included in development POD.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings no  
High erosion potential no  
Loss of soil productivity no  
Unusually large wellsite no  
Damage to improvements no  
Conflict with existing land use/values no

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: No special concerns for this site. Very small location and pit area. Truck mounted rig does not require much location preparation.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences over 1/2 mile

Possibility of H2S No

Size of rig/length of drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: \_\_\_\_\_

Comments: no special concerns for this area.

### Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) no

Proximity to recreation sites none in immediate area

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: Tongue River Reservoir is closest public recreation area

### 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: location on fee surface - no sites reported

### Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Exploration test well targeted to test Roberts coal beds at depth greater than 1500'. May not produce until included in an approved Plan of Development, therefore no social or economic impacts are likely—cumulative effects on socio-economics of the region are described in 2003 Statewide EIS.

### Remarks or Special Concerns for this site

Well is a shallow coal bed methane test. Wells are drilled with small rig and casing set to top of coal. Seven inch casing is cemented to surface. Partial de-watering of the coal bed is required to reduce pressure and release methane gas to the cleat system; this partial de-watering is expected to reduce, but not eliminate water in the coal aquifer. The water quality in coal bed aquifer wells is variable—this test well will provide water quality data for the tested interval.

### Summary: Evaluation of Impacts and Cumulative effects

Relatively minor impacts associated with this well, which cannot produce until included in an approved POD. Well is part of ongoing development in and near CX Field and will eventually use existing production facilities and compressors. No impacts are expected which differ significantly from those described in the EIS. Exception

locations granted –Docket 115-04

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): 

(title:) Administrator

Date: May 3, 2004

Other Persons Contacted:

\_\_\_\_\_

\_\_\_\_\_

(Name and Agency)

\_\_\_\_\_

(subject discussed)

\_\_\_\_\_

(date)

If location was inspected before permit approval:

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

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

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