

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Encore Operating, LP
Well Name/Number: Unit 43X-19
Location: NE SE Section 19 T4N R62E
County: Fallon, MT; Field (or Wildcat) Little Beaver East

Air Quality

(possible concerns)
Long drilling time 25-35 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 8550' TD Possible
H2S gas production yes
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: no special concerns.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface, oil based
invert emulsion mud to 5.5" casing point.
High water table no
Surface drainage leads to live water None, closest drainage is an unnamed
ephemeral tributary drainage to Big Gumbo Creek, about 1/8 of a mile north of this
location.
Water well contamination No, closest water well is about 1/4 mile to the west of this
location. Depth is unknown. Operator will drill surface hole with freshwater and set steel
surface casing to 1700' and cement it to surface.
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: 1700' of surface casing cemented to surface adequate to
protect freshwater zones. Also, fresh water mud systems to be used on surface
hole.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings none.
High erosion potential no, small cu up to 8' and small fill up to 7.1' 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 Large, 270'X400' 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: A short access road into the location will have to be constructed about 1/4 mile off an existing well trail. All other access will be off county roads and existing trails. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences nearest residences is about 1 mile to the west of this wellsite.

Possibility of H2S yes

Size of rig/length of drilling time Triple drilling rig 25 to 35 days drilling time

Mitigation:

- Proper BOP equipment
- Topographic sound barriers
- H2S contingency and/or evacuation plan
- Special equipment/procedures requirements
- Other: _____

Comments: no concerns Proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a 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 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 lands.

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 8550' TD vertical Red River formation test, in an existing oil field, Little Beaver.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. This well is within the boundaries of and existing oil and gas field. Some short term impacts will occur from the drilling of this well.

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 29, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(subject discussed) _____

Fallon County water wells

(date)

June 29, 2006

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____