

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

Operator: MRC LLC
Well Name/Number: Jenkins 8-25
Location: SE NE Section 25 T26N R15E
County: Chouteau MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig to drill to 1015' TD.

Possible H2S gas production: None anticipated.

In/near Class I air quality area: No Class I air quality area.

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 – using small rig to drill to 1015'TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage Little Birch Creek, an ephemeral drainage, about 1/2 of a mile to the west from this location. Closest live water is a stock pond, about 3/4 of a mile to the southwest from this location.

Water well contamination: No, closest water wells are about 1 mile and further in any direction from this location. This well will have surface hole drilled with freshwater and freshwater mud system. Surface casing will be run and cement to surface from 300'. If productive 4 1/2" production casing will be run and cemented to surface.

Porous/permeable soils: No, sandy bentonitic soils.

Class I stream drainage: No Class I stream drainages nearby.

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: Freshwater mud systems to be used to drill surface hole and mainhole. 7" surface casing will be run and cemented to surface from 300'. 4 1/2" production casing will be run and cemented to surface, if well is productive.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, no stream crossings anticipated.

High erosion potential: No, small cut, up to 8.4' and small fill, up to 8.5', 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 250'X250' location size required.

Damage to improvements: Slight, surface is grassland.

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 road, Cow Island Trail and Eagleton Road. An access will be built off an existing county road into this location, about 1.375 miles. Drilling fluids will be allowed to dry in the pits. Drill cuttings and solids will be allowed to dry in the unlined pit. Pit will be backfilled when dry. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is 1 mile and further in any direction from this location.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: No concerns. Adequate surface casing and operational BOP should mitigate any problems. Distance and topographical features 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: Only species listed as threatened or endangered are the, Pallid Sturgeon and Black-Footed Ferret. Candidate species are the Greater Sage Grouse, Sprague's Pipit and the Whitebark pine. NH Tracker website lists the

following species of concern (3) Black-tailed Prairie dog, Burrowing Owl and the Greater Sage Grouse,

Mitigation:

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

Comments: Private surface grasslands. Drilling of this well will occur after June 15. Location is on a rocky hill area not a good area for Prairie dogs and Sage Grouse. 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: Private surface grasslands. No concerns.

Social/Economic

(possible concerns)

- Substantial effect on tax base
- Create demand for new governmental services
- Population increase or relocation

Comments: Wildcat gas well. No concerns.

Remarks or Special Concerns for this site

Well is a 1015' Eagle 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 frame.

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): /s/ Steven Sasaki _____
(title:) Chief Field Inspector
Date: August 30, 2011 _____

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Chouteau County water wells _____
(subject discussed)
August 30, 2011 _____
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Chouteau County
(subject discussed)
August 30, 2011 _____
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T26N R15E
(subject discussed)
August 30, 2011 _____
(date)

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