

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

Operator: Montalban Oil & Gas Operation, Inc.
Location: SW NW Section 13 T37N R5W
County: Glacier, MT; Field (or Wildcat) Cut Bank

Air Quality

(possible concerns)

Long drilling time: No, 5 to 6 days drilling time.

Unusually deep drilling (high horsepower rig): No, 2900' TD, Madison Formation at total depth.

Possible H2S gas production: Very slight chance H2S from the Madison Formation.

In/near Class I air quality area: Closest Class I air quality area would be the Blackfeet Indian Reservation, about 7 miles to the west from this location.

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 2900' TD Cut Bank/Madison Formation development well. If there are not gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)

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

High water table: None anticipated at this location.

Surface drainage leads to live water No. Nearest drainage is an unnamed ephemeral tributary drainage to Red River, about 1/8 of a mile to the northeast from this location.

Water well contamination: No, closest water wells are about 5/8 of a mile to the northeast, about 5/8 of a mile to the southeast, about 3/4 of a mile to northeast and about 7/8 of a mile to the northeast from this location. Depth of these domestic and stock water wells range from 35' to 155'.

Porous/permeable soils: No, silty sandy bentonitic clay soils.

Class I stream drainage: No, Class I stream drainages in the area of review.

Mitigation:

- Lined reserve pit
- Adequate surface casing
- re-routed drainage around outside of location.**
- Closed mud system
- Off-site disposal of solids/liquids (in approved facility)
- Other: _____

Comments: 350' of surface casing will be set and cemented to surface adequate to protect freshwater zones, rule 36.22.1001. Also, fresh water mud systems to be used, rule 36.22.1001.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No high erosion potential anticipated at this wellsite. Location will require a moderate cut, up to 12.4' and small fill, up to 4.2', 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 a cultivated field.

Conflict with existing land use/values Slight, surface use cultivated field.

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 utilized existing county roads, Santa Rita Highway #214 and lease roads. A short access from Kruger well #9 will be constructed to this well location, Kruger #12. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby. No residences within a 1 mile radius from this location.

Possibility of H2S: Slight to none H2S.

Size of rig/length of drilling time: Small drilling rig/short 5 to 6 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: Standard pre-cautions for the area.

Comments: Adequate surface casing and operational BOP (3,000 psi annular) should mitigate any problems. (BOP's 3,000 psig annular) Rule 36.22.1014. No concerns.

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: None identified.

Conflict with game range/refuge management: None identified.

Threatened or endangered Species: Species identified as threatened or endangered are the Bull Trout, Grizzly Bear, Canada Lynx and Meltwater Lednian Stonefly.

Candidate species are Sprague's Pipit and the Whitebark Pine. Potential species of

concern is the Wolverine. NH Tracker website lists three(3) species of concern, Chestnut-collared Longspur, Long-billed Curlew and the Mc Cowan's Longspur

Mitigation:

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

Comments: Private surface cultivate land. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. 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

Social/Economic

(possible concerns)

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

Comments: Private surface cultivate land. There may be possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

Remarks or Special Concerns for this site

Well is a 2900' Madison Formation development well test in the Graben Coulee Field.

Summary: Evaluation of Impacts and Cumulative effects

No significant impacts expected in the drilling of this gas well. Some short term surface impacts will occur.

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: May 9, 2013

Other Persons Contacted:
Montana Bureau of Mines and Geology, GWIC
website
(Name and Agency)
Glacier County water wells.
(subject discussed)
May 9, 2013
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Glacier County
(subject discussed)
May 9, 2013
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T37N R5W
(subject discussed)
May 9, 2013
(date)

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