

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

Operator: Croft Petroleum Company.
Well Name/Number: Kinder No. 8-19
Location: SW SE NE Section 19T35N 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, 2800' TD
Possible H2S gas production No
n/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Gas well N/A.

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 2800' TD

Water Quality

(possible concerns)
Salt/oil based mud No, freshwater and freshwater mud system to TD 2750'. Drill out of production string with air.
High water table Possibly
Surface drainage leads to live water No, locations next to unnamed ephemeral drainages.
Water well contamination No, all water wells nearby are shallower than 500' in depth. Closest water well is about 3/8 mile to the northwest of this location and is only 327' in depth.
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: 500' surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be set and cemented with 125 sacks of cement. TOC should be about 1550' from surface.

Soils/Vegetation/Land Use

(possible concerns)
Stream crossings no

High erosion potential no, small cut, up to 2.4' and small fill, up to 4.8', required.
Loss of soil productivity no, location will be restored after drilling
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, appears to be partly on grassland and partly on cultivated land.

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 paved highway. About 1 miles of new access will be built into this location. Drill cuttings will be buried on site. Drilling fluids will be hauled to stock pond to seal pond. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Closest residence 1.5 miles to the southeast of this location.

Possibility of H2S None

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: _____

Comments: Working BOP should mitigate any issues. Distance is sufficient to not be a problem with noise. No concerns.

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: _____

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 2800' Ellis Formation test in an existing gas field, Cut Bank Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term surface impacts will occur, but will 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 27, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website, Blaine County water wells.

(subject discussed)

February 27, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____