

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

Operator: Montana Land and Exploration, Inc.
Well Name/Number: ML&E SW Cherry Patch 14-28
Location: SE SW Section 28 T33N R21E
County: Blaine, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time no, 2 to 3 days drilling time
Unusually deep drilling (high horsepower rig) no, 1409' TD
Possible H2S gas production no
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 – using small rig to drill to 1409' TD

Water Quality

(possible concerns)

Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, closest live water is a stock pond about 1/4 mile to the southeast. Nearby unnamed ephemeral drainage is 1/16 of a mile to the east of this location.
Water well contamination Yes, closest water wells 1/4 of a mile to the west, stock water, 256' and 133' domestic well.
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: Set 270' surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production 4 1/2" if successful will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no
High erosion potential no, small cut, up to 1.7' and small fill, up to 2.2', 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, 250'X250' location size required.

Damage to improvements none, appears to be 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 over existing county road. A short access off the county road of about ¼ mile will be built into this location. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences residence about ¼ mile to the south and ½ mile to the west of this location. Zurich, MT about 1.5 miles to the west.

Possibility of H2S none

Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: no concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.

Proximity to recreation sites Zurich Park about 1.5 miles to the northwest.

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

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 land

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 1409' Eagle Formation of test

Summary: Evaluation of Impacts and Cumulative effects

No, long term impacts expected. Some short term impacts will occur, but can 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: March 31, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Blaine County water wells _____

(subject discussed)

March 31, 2006 _____

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____