

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

Operator: Montana Land and Exploration, Inc.
Well Name/Number: ML&E SW Cherry Patch 11-20
Location: NE SW Section 20 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, 1432' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) 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 1432' TD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table possible
Surface drainage leads to live water no, closest drainage is an ephemeral drainage, Fifteen Mile Creek. It drains into the Milk River about 2 miles to the south of this location.
Water well contamination No, nearest water well is within 1/4 mile of this location, but shallower than 150'. Surface hole will be drilled with freshwater and freshwater muds. Steel surface casing will be run to 150' and cemented back to surface. Mainhole will be drilled with freshwater and freshwater muds. Production casing if run will be cemented 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: 150' surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. If production is established production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut up to 8.2' and small fill, up to 4.1', 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 no, approximately, 250'X250' location size required.
Damage to improvements no, 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 will be from existing county road. A short access road will be constructed into this location, about 300'. Cuttings will be buried in the pit, free fluids will be land spread with surface owner approval or recycled to the next location, Pit will be allowed to dry and then backfilled. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Nearest residence is 1/4 of a mile to the southwest and the town of Zurich about 1.5 miles to the southwest of this location. Zurich public park about 3/16 of a mile south of this location.
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 yes, Zurich Park 3/16 of a mile to the south of this location.
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 Zurich park far enough distant from this drilling location.

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

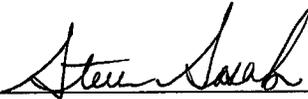
Remarks or Special Concerns for this site

Well is a 1432' Eagle Formation of test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected, some short term 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: March 9, 2006

Other Persons Contacted:

(Name and Agency)

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

(subject discussed)

March 9, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____