

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

Operator: Slawson Exploration Company, Inc.
Well Name/Number: Pershing 1-24H
Location: NE NE Section 24 T24N R52E
County: Richland, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time No, 50-60 days drilling time.

Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP

Possible H2S gas production slight

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: 3 Legged Bakken horizontal well TVD 8958' TVD, 13,395'M, 8985' TVD, 14,875'MD, and 13,571'MD 9038' TVD

Water Quality

(possible concerns)

Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud. Horizontal laterals to be drilled with brine water.

High water table No

Surface drainage leads to live water Yes drainage to North Fork Redwater Creek, next to location. North Fork Redwater Creek about 1/8 of a mile to the south of this location.

Water well contamination No, no water wells within 1 mile of this location. Surface hole will be drilled with freshwater, surface casing will be set at 1450' and cemented back to surface. All water wells nearby are shallow, about 160' in depth.

Porous/permeable soils No, gumbo soils

Class I stream drainage No, Class I stream drainages.

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: 1450' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings None

High erosion potential No, location will require small cut of 4.3' and moderate fill of 10.9', required.

Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite No, large well site 430'X300'

Damage to improvements No, location to be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

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: Surface hole cuttings will be disposed of on drillsite. Main hole and lateral hole, oil based and brine cuttings will be buried in the lined reserve pit. Fluids will be recycled to the next location or recycled back to the mud company's storage tanks. Any completion fluids left in the pit will be hauled to a Class II commercial disposal. Access will be over existing county road #133. About 400' of new access road will be built off the county road into this location. No Concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences No residences within 1 mile of the location

Possibility of H2S Slight

Size of rig/length of drilling time Triple drilling rig 50 to 60 days drilling time.

Mitigation:

- Proper BOP equipment
- Topographic sound barriers
- H2S contingency and/or evacuation plan
- Special equipment/procedures requirements
- Other: _____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise problems.

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: Private surface

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns

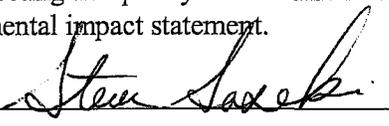
Remarks or Special Concerns for this site

None

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term 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: April 27, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(subject discussed)

Water wells in Richland County

(date)

April 27, 2006

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____