

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Staghorn Energy, LLC
Well Name/Number: Lowell Larson 1-28H
Location: NW NE 28 T23N R58E
County: Richland, MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)
Long drilling time no
Unusually deep drilling (high horsepower rig) no
Possible H2S gas production No
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) no

Mitigation:

 Air quality permit (AQB review)
xx Gas plants/pipelines available for sour gas
 Special equipment/procedures requirements
 Other:

Comments: No special concerns

Water Quality

(possible concerns)
Salt/oil based mud Yes
High water table no
Surface drainage leads to live water no
Water well contamination no
Porous/permeable soils no
Class I stream drainage no

Mitigation:

xx Lined reserve pit
xx Adequate surface casing
 Berms/dykes, re-routed drainage
 Closed mud system
 Off-site disposal of solids/liquids (in approved facility)
 Other:

Comments: will use closed mud system for oil base mud, surface casing is adequate. Oil mud recycled. Oil drilled cuttings stored in lined pit.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no
Loss of soil productivity no
Unusually large wellsite no
Damage to improvements no
Conflict with existing land use/values no

Mitigation

 Avoid improvements (topographic tolerance)
 Exception location requested
xx Stockpile topsoil
 Stream Crossing Permit (other agency review)
xx Reclaim unused part of wellsite if productive
 Special construction methods to enhance reclamation
 Other

Comments: No special concerns for this site. Location requires about 5' of cut/fill; location is about 500' from county road west of Sidney.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences > 1/4 mile
Possibility of H2S No
Size of rig/length of drilling time

Mitigation:

xx Proper BOP equipment
 Topographic sound barriers
 H2S contingency and/or evacuation plan
 Special equipment/procedures requirements

Other: _____
Comments: no special concerns, Bakken produces no H2S.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) no
Proximity to recreation sites none in immediate area
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 special concerns in this area

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 lands

Social/Economic

(possible concerns)
___ Substantial effect on tax base
___ Create demand for new governmental services
___ Population increase or relocation
Comments: no special concerns

Remarks or Special Concerns for this site

Well is a dual lateral Horizontal Bakken test
Summary: Evaluation of Impacts and Cumulative effects
Minor, short term impacts associated with this project.

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) [Signature]
(title:) Administrator
Date: February 11, 2004
Other Persons Contacted:

(Name and Agency)

(subject discussed)

(date)

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