

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

Operator: Targe Energy Explortation & Production, LLC

Well Name/Number: Johannsen No. 3-20

Location: NE NW Section 20T34N R1E

County: Toole, MT; **Field (or Wildcat)** East Kevin

Air Quality

(possible concerns)

Long drilling time: No, 2 to 3 days drilling time.

Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig to drill to 650' TD.

Possible H₂S gas production: None

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 650' TD

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system on surface hole.

Air/mist out from under surface casing. Convert to freshwater mud if necessary.

High water table: No

Surface drainage leads to live water: No drainages or live water nearby.

Water well contamination: No, water wells nearby. This well will drill surface hole with freshwater and set 150' of steel casing, which will be cemented to surface to protect surface waters.

Porous/permeable soils: No, sandy/silty bentonitic 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' of surface hole will be drilled with freshwater and surface casing cemented to surface adequate to protect freshwater zones. Also, air/mist systems to be used on the mainhole.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None, no drainages to be crossed.

High erosion potential: No, small cut, up to 3.1' and small fill, up to 2.4', 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, 150'X250' location size required.

Damage to improvements: Slight, 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 county road, Gus Blase road. About 1100' of new access will be built into this location. Drill cuttings will be buried on site. Drilling fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No, residences within 1 mile from this location.

Old cemetery and church, about 1600' to the west of this location.

Possibility of H2S: No

Size of rig/length of drilling time: Small single derrick drilling rig, 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: 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): 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: None identified.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: No concerns. Private surface lands.

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: No concerns. Private surface lands.

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

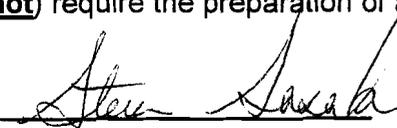
Well is a 650' Bow Island Formation gas test.

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: June 20, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website

(Name and Agency)

Toole County water wells.

(subject discussed)

June 20, 2008

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____