

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

Operator: Big Snowy Resources, LP
Well Name/Number: Kelly BSR North Mosser #3
Location: SE NE NW Section 26 T3S R24E
County: Yellowstone, MT; **Field (or Wildcat)** Mosser Dome

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig): No, 1050' 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 1050' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater or freshwater mud system and/or air.
High water table: No
Surface drainage leads to live water: No, nearest drainage is an unnamed ephemeral tributary drainage to Davis Creek, about 1/4 of a mile to the west and 3/8 of a mile to the east of this location.
Water well contamination: No, water wells close by. If productive 4 1/2" production casing will be cemented to surface. Closest water well is 3/4 mile to the southeast and is a 450' deep stock water well.
Porous/permeable soils: No, 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: 20' of surface casing cemented to surface adequate to protect freshwater zones. Also, air and/or fresh water mud systems to be used. 4 1/2" production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: No, crossing.

High erosion potential: No, no cut and no fill required. Small self leveling drilling rig.

Loss of soil productivity: No, location will be restored after drilling in nonproductive and if productive unused portion of the drillsite will be reclaimed.

Unusually large wellsite: No, 100'X100' location size required.

Damage to improvements: Slight, surface use CRP field.

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 access will be over existing county roads. About 1620' of new access will be built. Cuttings will be buried in the earthen pit. 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: Yes, within ¼ of a mile to the southeast of this wellsite, Rawhouser home and ranch.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: Wahinton Rotating control Diverter head Model 3022 Diverter will be used instead of a BOP. This is due to the area being a high drilling density to the Greybull formation and bottom hole pressure being depleted from production. 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: Private surface lands. 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 lands. No concerns.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns. Existing oil field, Mosser Domer Oil Field.

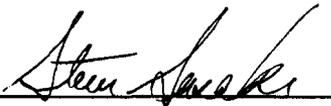
Remarks or Special Concerns for this site

Well is a 1050' Greybull Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected. Some short term surface impacts will occur, but will be mitigated in time. Development well in an existing oil field, Mosser Dome Field.

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: December 13, 2007

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC
website

(Name and Agency)

Water wells in Yellowstone County

(subject discussed)

December 13, 2007

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____