

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

Operator: Central Montana Resources, LLC
Well Name/Number: Degner Ranch/Asfaloth #1B
Location: SW NW Section 32 T14N R25E
County: Petroleum, MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)

Long drilling time: No, 15 to 20 days drilling time.

Unusually deep drilling (high horsepower rig): No, a single or double drilling rig to drill a vertical pilot hole to 2800' and plug back and kickoff a single lateral horizontal (Heath Formation) 5587' MD/1960' TVD.

Possible H2S gas production: Slight chance H2S.

In/near Class I air quality area: No class I air quality area.

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 single or double rig to drill to a vertical pilot hole to 2800' and plugback and kickoff a single lateral horizontal (Heath Formation) 5587' MD/1960' TVD.

Water Quality

(possible concerns)

Salt/oil based mud: No, surface hole will be drilled with freshwater drilling fluids.

Mainhole will be drilled with oil based invert drilling fluids.

High water table: No high water table in the area of review.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage to Yellow Water Reservoir, about 3/8 of a mile to the northwest from this location.

Water well contamination: No, nearest water well is about 3/4 of a mile to the southwest from this location. Depth of these water well are 700' to 740'. This well will set 9 5/8" surface casing to 1050' and cement to surface.

Porous/permeable soils: No, silty sandy clay 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: 1050' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud system to be used on surface hole. Oil based

drilling fluids will be used below surface casing. All oil based invert drilling fluids will be recycled and all completion fluids will evaporated in the lined pit. All drill cuttings and mud solids will buried in the lined pit. Lined pit will backfilled when dry. No concerns.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No stream crossings require.

High erosion potential: No, small cut, up to 8.6' and small fill, up to 4.6', 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, 300'X250' location size required.

Damage to improvements: Slight, surface use appears to be grazing 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 Requires DEQ General Permit for Storm Water Discharge Associated with Construction Activity, under ARM 17.30.1102(28).

Comments: Access will be from existing county road, Yellow Water Road and ranch trail. Short road to be built from trail access into location, about 497'. Freshwater drilled cuttings and mud solids will buried in the lined pit. Oil based invert drilling fluid will be recycled. Drill cuttings and mud solids from the oil based drilling fluids will be buried in the lined pit. Completion fluids will be allowed to evaporate. Lined pit will backfilled when dry. No concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is about ¾ of a mile to the southwest from this location.

Possibility of H2S: Slight.

Size of rig/length of drilling time: Small drilling rig/short 15 to 20 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: Operational BOP and adequate surface casing should mitigate any problems. No concerns.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: War Horse National Wildlife Refuge, about 3/8 of a mile to the east and about 1 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: Threatened or endangered species identified are the Pallid Sturgeon and the Black Footed Ferret. Species of concern, Greater Sage Grouse.

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DSL)
- Screening/fencing of pits, drillsite
- Other: _____

Comments: Private surface lands. Contact surface owner for Greater Sage Grouse concerns. Sage Grouse Mitigation for Oil & Gas Operations on School Trust Lands (November 2007) requires a 1/4 mile buffer around active Leaks and time restrictions apply. This well is more than 1/4 mile from the nearest Lek and will be drilled after June 15, 2010 and before March 1, 2011. Pallid Sturgeon habitat is associated with the Missouri River and not an issue.

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 lands. No concerns.

Social/Economic

(possible concerns)

- Substantial effect on tax base
- Create demand for new governmental services
- Population increase or relocation

Comments: Well is a wildcat, until production is established no social or economic impact can be assessed.

Remarks or Special Concerns for this site

Well is a wildcat vertical pilot hole to 2800' and plugback and kickoff a single lateral horizontal (Heath Formation) 5587' MD/1960' TVD.

Summary: Evaluation of Impacts and Cumulative effects

Possible long term impacts to Greater Sage Grouse habitat per FWP, if this well is successful and full development occurs. Some short term impacts will occur from the drilling of this well. If unsuccessful well location will be restored.

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): /s/ Steven Sasaki
(title:) Chief Field Inspector
Date: January 27, 2011

Other Persons Contacted:

Montana Bureau of Mines and Geology GWIC website

(Name and Agency)

Petroleum County water wells

(subject discussed)

July 6, 2010

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Petroleum County

(subject discussed)

July 6, 2010

(date)

Ms. Windy Davis, Montana FWP

(Name and Agency)

Greater Sage Grouse Leks in Petroleum County, Montana

(subject discussed)

July 12, 2010

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____